Part-architecture:
the *Maison de Verre* through the *Large Glass*

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I, Emma Jane Cheatle, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

ABSTRACT

My thesis is an examination of a building, the *Maison de Verre* (Pierre Chareau, Paris, 1928–32), through an artwork, the *Large Glass* (Marcel Duchamp, Paris, New York, 1915–23).[1] Starting from the fact that both are predominantly constructed from glass, I further align the two works materially, historically and conceptually. Ultimately, I challenge the accepted architectural descriptions of the *Maison de Verre*, providing original spatial and social accounts of its use and inhabitation in the 1930s.

The *Maison de Verre* was designed as a gynaecology clinic and family home for Annie and Dr Jean Dalsace. Utilising a 'free-plan', it spatialised a programme for progressive female sexual health within a domestic setting. In the context of legislation criminalising contraception and abortion, the building was, perhaps by necessity, not visible from the street. The *Large Glass*, in contrast, is an overt narrative on unconsummated desire, and, I argue, despite being constructed in New York, is Duchamp's response to 1910–20s Parisian sexual mores.

I interrogate these ideas through a method for which I have coined the term 'part-architecture', developed from theories of the psychoanalytic 'L Schema' and 'part-object', after Rosalind Krauss and Jacques Lacan. Part-architecture is an original architectural production which combines written critical theory and design operations – including fiction writing, drawing, book-arts and audio – to recover the (now invisible) historical, social and sexual interactions occurring in and between the *Maison de Verre* and the *Large Glass*. Three central

[1] Although building names are conventionally written in roman, I italicise the *Maison de Verre* to reflect my alignment of it with the *Large Glass*.

chapters, structured around the materials glass, dust and air – where glass signifies looking, dust the discarded past, and air the activation of invisible registers – recover the works as new accounts. Importantly, part-architecture offers descriptions that suggest the works remain partial, open ended and contingent.

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PROLOGUE

The *Maison de Verre* is fronted with glass. This fact belies its nature. Secreted in a courtyard, reached by a dark passage, through a wedge of eighteenth-century *hôtels*, the glass is not visible to the street. Once reached, the façade obscures more than it reveals: blank, translucent cast lenses, an endless pattern of 200mm squares pockmarked with the imprint of a circle. There is no visible door, no visible interior.

I am standing in the courtyard, facing the soft dumb glass wall. Its translucency above and reflectivity below resist a view of the interior. Instead, the entrance I have come through into the courtyard and the surrounding buildings are reflected in the glass. As I move closer I am reflected also, my presence caught like a momentary photograph. There is no one about and the other small windows looking onto the courtyard from behind me and to the sides are dark. It is not initially obvious how one enters the building. Two narrow freestanding, laddered structures bearing floodlights rise up and connect to the top of the façade with posts. To the left sits a small side wing. Glass lenses wrap around onto this, punctuated by horizontal stripes of clear glazing with opening windows. To the far right, there is a stair up to a door leading to the remaining upper apartment.

The lower clear glazing to the front of the building appears to have no openings. To the right, the wall is recessed as a plane of lenses, twenty wide by ten high with a clerestory strip running above. At the centre of the façade this plane overlaps the outer glass layer, and it is here that the entrance is revealed, rectilinear to the two layers. Entrance doors of clear glass bridge the separation. Before the doors, in front of the lenses, a steel post about a metre high rises from the floor. Three buzzers, marked 'docteur, visites, service' from top to bottom, invite one to make a choice. As I stand here, I wonder at the room behind the lenses, and at the shadows and light playing inside. I press a buzzer and enter.

I am folded into the building. I slide open a cast glass door and walk down a central corridor, with more cast glass screening to the left, towards an open full height valve like door, through which I can see straight through the whole house to the garden. Behind me the sunlight comes strongly from the outside and the combination of the light and the view to the garden gives the impression that the building has no real interior. The rear façade repeats the front lenses but with a sharp strip of clear glazing set in the soft diffuse panels. This doubling of the wall suggests I am merely delayed between two planes of glass. The house inverts the old bourgeois interior: the courtyard and the rear garden appear to be more like rooms with their clearly defined edges. The house interior is a fragmented, layered, endlessly fluctuating set of inter-functioning spaces.

It has always seemed to me that the *Large Glass* should not be viewed merely as a composition to be decoded, nor seen without a backdrop, a scene beyond. I walk into gallery 182. This is a large space and I am in awe of the number of Duchamp works here in one room. I am side on to the *Large Glass*. As I walk towards and around to the front, its figure in the space is much larger than I had expected [figure 1.2]. A large plate glass window of modern architecture, it suggests a series of doubles: there are two separate planes of glass, vertically arranged, with a transom between; it has a front and a back, splitting the gallery room into fore and background; it refers to a place and time outside the gallery. I stand in front looking at the panes of glass, with the story laid upon them, entranced and contained by the room. I am both outside and inside the glass, which is inside and outside the room. I am regarding, staring at and through at the same time; and then walking around it to look at the other side, through the other side, glancing from the side as I go.

As you walk around it, you might as I do allow yourself to touch the inside of the glass in your mind, experience the stippled, cracked, oily, leaden, dusty detail against the low light of the gallery and the view through the window beyond, emptying your mind of the theories on neoplatonics and alchemy;[1] slip into it as you look, wrapped in the lying female floating above, projected through as shadow; dress up in the oiled armour of the 'Bachelor' outfits, wondering at their empty childlike play; sneeze at the dust, running your hand over it, fingers catching. The *Large Glass* is for touching, looking through and back again, carnal, visual, carnally visual.

Back at the front, I am uncomfortably dwarfed by it: the transom dividing its upper and lower parts dissects me at eye level, the 'Bride' inaccessibly hovering above. I see I am reflected in the glass, embodied there, figuratively represented somewhere I cannot physically enter. The ambiguity of glass means I am also cast though it as a shadow, mingled with those of the Bride and Bachelor machines. I walk as close as I can, absorb the texture of the glass, paint, lead and dust. I walk around to the other side and see the back of the painting, all behind and repeated but reversed, and back through to the space I had just occupied. A trace of myself remains in the front as the viewer. I have become the view. I move out of the way hastily, then repeat the sequence.

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[1] Art historians have viewed the *Large Glass* variously as alchemical: Arturo Schwarz, 'The Alchemist Stripped Bare in the Bachelor, Even', in Anne d'Harnoncourt and Kynaston McShine (eds.), *Marcel Duchamp* (Philadelphia: Philadelphia Museum of Art, 1973); neo-platonic: Octavio Paz, *Marcel Duchamp: Appearance Stripped Bare*. (New York: Viking, 1978); perspectival: Jean Clair, 'Marcel Duchamp et la tradition des perspecteurs' in Ulf Linde, *Cycle, La roue de bicyclette*. *Marcel Duchamp: Abécédaire* (Paris: Musée National d'Art Moderne, 1977); and n-dimensional: Craig Adcock, *Marcel Duchamp's Notes from the 'Large Glass'. An n-Dimensional Analysis* (Ann Arbor: UMI Research Press, 1981); see Rosalind E. Krauss, *The Optical Unconscious* (Cambridge: October Books, 1993), 123. Krauss dismantles the idea of the *Large Glass* being a 'master-code', and makes more interesting interpretations, see Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977), 68–81; and Jean-François Lyotard, *Les Transformateurs Duchamp Duchamp's TRANS/formers* [1977], (trans.) Ian McLeod (Leuven: Leuven University Press, 2010). I discuss these further in my chapter 'Background'.

1 Introduction

The Maison de Verre through the Large Glass

Part-architecture

Design

Thesis Outline

Figure 1.1: (**left**) Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art. Photograph Emma Cheatle, 2010; (**right**) Pierre Chareau, *Maison de Verre,* Paris, 1928–32. Photograph Emma Cheatle, 2009.

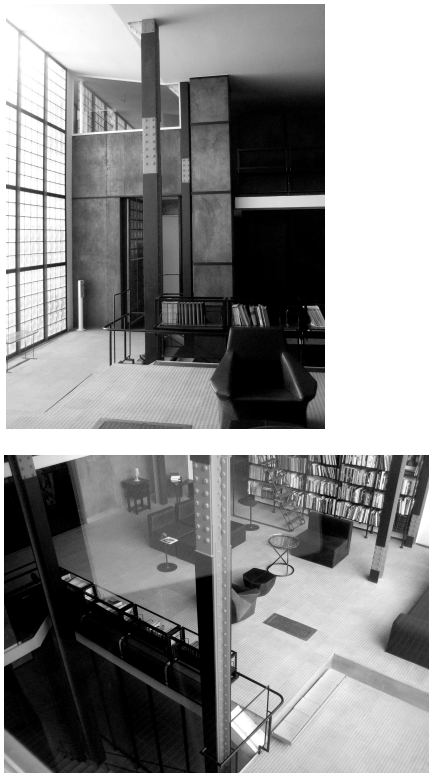

Figure 1.2: Pierre Chareau, *Maison de Verre*, 1928–32. Salon. Photograph Emma Cheatle, 2009.

The *Maison de Verre* through the *Large Glass*

On encountering the *Maison de Verre* and the *Large Glass* twenty years ago, they appeared to me be related or aligned, sharing common materials – glass – and formed around similar themes – sexual relations between male and female. This thesis argues for a stronger set of connections, and reading both works inventively, situates the *Large Glass* as a framework and set of clues to understanding the *Maison de Verre* [figure 1.1]. Using a series of part-analytical part-creative processes I call 'part-architecture', I both analyse the *Large Glass* as a spatial proposition and construct a very different view of the *Maison de Verre* than the one propagated by traditional architectural history.

The *Maison de Verre* was designed by Pierre Chareau [1883–1950] in Paris between 1928–32 for gynaecologist Dr Jean Dalsace and his wife, Annie Dalsace. As well as its comprehensive use of glass as a building material, it is notable for its 'free-plan' (open plan layout) and the incorporation of the gynaecology clinic into the main body of the house. The Dalsaces were known for their intellectual connections and progressive politics. On completion, the huge first floor salon, glazed by a wall of lenses, was a scene frequented by well known avant-garde Parisians [figure 1.2].[1] Equally, the clinic, occupying most of the ground floor and also screened from the public face by glass lenses alone, must have been visited by numerous woman seeking treatment or advice, including contraception and abortion [figure 1.3]. Their names and histories are unknown. This, it can be argued, is due, on the one hand, to the social context of pronatalism which attempted to maintain a maternal and domestic agenda for women,

[1] It was said to be visited regularly by Louis Aragon, Paul Eluard, Jean Cocteau, Yves Tanguy, Joan Miro, and Max Jacob. Maria Gough, 'Paris, Capital of the Soviet Avant-Garde', in *October*, 101 (Summer, 2002), 55. Also see 55–61. Gough is citing Adam Gopnik, 'The Ghost of the Glass', in *The New Yorker,* 12 (May 9, 1994), 63.

and on the other, the perception of appropriate subject matter for twentieth century architectural history writing.

The enigmatic artwork the *Large Glass*, or *La Mariée mise à nu par ses célibitaires, même,* (*The Bride Stripped Bare by her Bachelors, Even*), was made by Marcel Duchamp [1887–1968] in New York between 1915–23, before he returned to Paris. A large vertical construction nearly three metres high and two wide, it is divided horizontally into two glass panels on which a narrative of unconsummated sex between the Bride above and the Bachelors below was played out. Framed in steel, their relations are composed through instruments and figures made of oil, varnish, lead foil, lead wire, silver and dust applied painstakingly to the back surface of the panes of glass. It is now too fragile to be moved and permanently housed at the Philadelphia Museum of Art [figure 1.4]. Duchamp accompanied the artwork with a number of notes suggesting its narrative. I argue that these, along with early prototypes and other specific artworks, comprise a practice through which the figure of the *Large Glass* can be understood as a complex discourse on sexuality in the early twentieth century.[2]

If the *Large Glass'* bodies are engaging in spatial events, captured onto its flat surfaces, the *Maison de Verre*, a real house, has memories impressed onto its objects and spaces, which operate as clues to its inhabitants. My thesis proceeds from a constellation of questions and arguments which further analyse the relationship between the *Large Glass* and *Maison de Verre*, and suggest original

Figure 1.3: Pierre Chareau, *Maison de Verre*, 1928–32. Gynaecology surgery from the inside. Photograph Emma Cheatle, 2009.

[2] Marcel Duchamp, 'The Box of 1914', (trans) Elmer Peterson, 'The Green Box', (trans.) Cleve Gray, 'À l'infinitif', (trans) Cleve Gray, in Michel Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973). Also see Marcel Duchamp, *Marcel Duchamp, Notes* (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980); Marcel Duchamp, *From the Green Box,* (trans.) George Heard Hamilton (New Haven: Readymade Press, 1957); Marcel Duchamp, *Manual of Instructions for Étant donnés : 1° – la chute d'eau, 2° – le gaz d'éclairage* (Philadelphia: Philadelphia Museum of Art, 1987). The prototypes are explored in 'Background'.

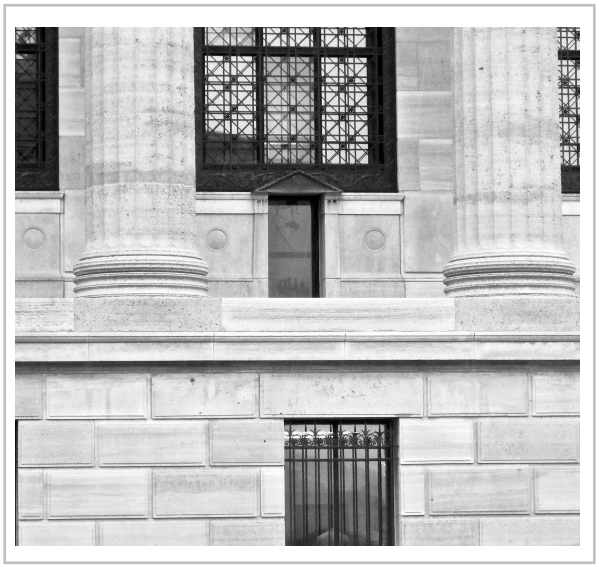

Figure 1.4: Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art, just seen in the centre through a window into gallery. Photograph Emma Cheatle, 2010.

readings of the *Maison de Verre*. Firstly, I argue for a temporal overlap: the *Large Glass* was conceived as early as 1912, in Paris.[3] It was repaired and altered in 1936, four years after the completion of the building, which was conceived in 1927. Together then, they span a period of history from the First to the Second World War. How is the *Maison de Verre's* extensive use of glass, like that of the *Large Glass*, deployed as a modernist response? What is the meaning of their other materials? Secondly, I argue that the *Large Glass*, although not constructed in Paris, is Duchamp's response to the city's prewar socio-sexual context. Can it, then, be read as a form of narrative history, and as a precedent to the *Maison de Verre*? If the building is similarly a register of the ensuing interwar period, how does it embody attitudes to sexuality, health, hygiene and emancipation? On completion, who were the building's inhabitants and visitors and how did they use its domestic and gynaecological spaces? How is the architecture a construct which has viewed and recorded, and now recalls their bodies? Thirdly, is it possible there were actual social interactions between Duchamp (or his lover, Mary Reynolds) and the inhabitants of the *Maison de Verre*? In response to these questions, the *Large Glass* and the *Maison de Verre* become contexts and theories of sexuality and space to each other. Through alignments and juxtapositions I make effective original interpretations of each.

I am not the first to suggest a relationship between the *Maison de Verre* and the *Large Glass*. Two architectural writers do so: Paolo Mellis in 1983 and

[3] The paintings *Virgin No. 1*, 1912, *The Passage from the Virgin to the Bride*, 1912 and *Bride*, 1912 and prototypes *Glider Containing a Water Mill in Neighbouring Metals*, 1913-1915, *Nine Malic Moulds*, 1914-1915, *Network of Stoppages*, 1914 were made in Paris before Duchamp left for New York and began constructing the *Large Glass* in 1915.

Kenneth Frampton in 1984.[4] Each makes formal and linguistic associations which I discuss in the next chapter, 'Background'. Though appreciative of their ideas, I depart from them substantially. The primary goal of my thesis is to make original accounts of the *Maison de Verre* which challenge its position in architectural history and recover its occupation and socio-sexual significance in 1930s Paris. I argue that the *Large Glass* forms a precedent and context to the *Maison de Verre*: the overt depiction of sexuality on its flat surfaces is unfolded covertly through the three-dimensional spaces of the building's house and clinic. I build a historical and theoretical dialogue between the two works, seeking consonance, overlap and points of departure. The building, like the artwork, embodies early twentieth century attitudes to sexuality, health, hygiene and emancipation. Its architecture is a construct which has viewed and recorded, and now recalls the inhabitants and visitors and their use of its domestic and gynaecological spaces. Further, my thesis makes pertinent and original readings of the *Large Glass*, around its depiction of the body as a set of medical instruments, and proposing that, as a construction and set of spaces, it is a form of incomplete architecture.

Part-architecture

I call my thesis part-architecture to describe a method of working which results in new forms of creative history writing: part-architectures. The first half of the thesis, Parts I and II, are preparatory. In 'Background' I give underlying descriptions and in 'Part-object, Part-architecture' I develop my working method. The second half,

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[4] Paolo Mellis, 'Pierre Chareau and the Glass House', in *Domus,* 640 (June 1983), 22–29; Kenneth Frampton, 'Pierre Chareau. An Eclectic Architect' [1984], in Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 234–248.

Part III, is composed of three part-architectures, chapters called ‘Glass’, ‘Dust’ and ‘Air’.

Part-architecture, a term I coined early in the research, constitutes an original method of architectural history and design thinking. Springing from my past work and education, I have long been interested in overlapping history and theory writing with design operations. History and design are usually seen as wholly different pursuits, and my thesis set out to devise an architectural production which critically combines them. Importantly, the aspects of history I am interested in describing – the social underpinnings, experience and inhabitation of architecture, in particular domestic interactions, sexuality and female occupations – tend to either be marginal, found from sources outside architectural history or unrecorded and elusive. My approach is to seek out the known or knowable facts by pursuing a diverse and eclectic range of research sources. Further, when I find myself in the margins, or meet a gap, I look for answers by other means, using the design forms of creative writing and analytic plan drawings. These both extend the research and fill the gaps through acts of informed imagination.

The term part-architecture is inspired by aspects of Rosalind Krauss’ work *The Optical Unconscious*. Here, she takes a new approach to art history, using Jacques Lacan’s psychoanalytic ‘L Schema’ diagram, and its associated concept of the ‘part-object’, as analytic tools.[5] The L Schema was one of several Lacan used to demonstrate the development of the self as a subject over time, through his or her relational part-objects, that is, the objects s/he collects or associates with particular bodies, memories or events. Krauss develops new forms of

[5] Rosalind Krauss, *The Optical Unconscious* (Cambridge: October Books, 1994), 22, 23.

Lacan's schema to show the way certain artworks evoke memory, image or emotion in the viewing subject.[6]

Studying Lacan's writing in more detail, I argue that the L Schema is an inherently spatial and temporal figure – its part-objects are housed in a three-dimensional configuration, formed over time.[7] In equal and opposite ways, the *Large Glass* and the *Maison de Verre* can be read as spatial schemas of social interactions. Both are collections of parts (or retrospective part-objects) to be scrutinised and analysed in an attempt to recover the bodies, events and social interactions that went on there.

Expanding on readings of the L Schema, I devised a part-architecture schema as an index to the project.[8] Rather than suggesting another formal representation or analysis of a building, it indicates the *processes* of retrieving aspects of architectural history that are not usually told. Part-architecture sets out a reading of architecture as a frame for historic, social interactions and inhabitations, exposing the parts of these that are normally forgotten or unspoken, or that cannot be retrieved through the archive. It culminates in new form of critical architectural writing, which, rather than forming a single definitive history, is recognised as

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[6] I expand fully on the L Schema in my method chapter 'Part-object, Part-architecture'. See figure 3.2.

[7] Jacques Lacan, 'Seminar on "The Purloined Letter"' [1956], in Jacques Lacan, *Écrits* (trans.) Bruce Fink (New York: W.W. Norton, 2002), 40; Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), 214. The two versions of *Écrits* used in my thesis provide different translations and include differing texts and diagrams.

[8] See 'Part-object Part-architecture' for a description of this thinking. The part-architecture schema can be seen on page 101. I use the term 'index' following Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977), 68–81. Her examples include a photograph, or a footprint. Also see C.S. Pierce, 'Division of Signs', in *Collected Papers* [1897] (Cambridge: Harvard University Press, 1932).

a set of contingent and ‘partial’ stories. In this instance, these recount the *Maison de Verre* as a retrospective construction, written now, in the present.

As indicated, part-architecture combines the research modes of history and design. Both are necessary, and rather than operating in parallel, or being illustrative, the outcomes of each inform the other. Arguments driven by historical research are rethought or augmented by designs, which analyse, speculate or propose ideas beyond the history/theory. In turn these are reflected upon by the history/theory writing.

Design

The design forms I employ include creative or fictional writing, analytic drawing, book designs and audio works. In my work preceding the thesis research, I had explored architectural technical drawing as a form of critique, drawing out the details and anachronisms of a space at different scales with unexpected details of the bodies that may have inhabited it. In the thesis I develop this method of using architectural drawing as a tool for analysis. Processes of measuring, observing and recording the known aspects of a space are accompanied by those which ‘draw-out’ or speculate and uncover the unknown.

The early drawings of the thesis were made as part of my internal methods for thinking and finding things out, rather than for an external audience. They are experimental, sometimes sketch-like, rather than finished pieces in their own right. These drawings include maps of Paris seeking out the places Duchamp had lived in and frequented, and then the areas around the *Maison de Verre*. Accompanied by collaged photographs by Eugène Atget and Brassaï, these were attempts to trace out and visualise specific areas and spaces in early twentieth cen-

tury Paris [Plates 8, 18–21].[9] These were followed by plan drawings of the *Maison de Verre* specifically tracing routes occupants and visitors may have made [Plates 9–11], and collages of screens and images they may have seen [Plate 15, 17, 22]. In much of this early design work, [Plates 4–30], I was exploring possible forms of working to take forward through the thesis. In a sense they now form an archive to the work [Plate 30]. This archive is not part-architecture as such but a kind of precursor to it, underlaying the thesis with various possibilities, some of which – particularly types of plans and book/box forms – become decisive modes of working in the part-architecture chapters 'Glass', 'Dust' and 'Air'.

From the outset, I also used creative writing [Plate 16]. This allowed me to experiment with new forms of architectural description, with and beyond drawing, combining technical architectural language with different modes of experiencing or feeling [see for example 'Prologue', Plate 73]. It was also propositional, speculating on what might have happened in the *Maison de Verre*, and who may have visited. For this reason, the way in which it proposed, I began to call it a form of design. Following the earlier more speculative drawings and experiments described in the last paragraph, the creative writing, which I call 'fiction' hereon, is integral to the whole thesis. Each of the main chapters of the thesis is structured around a set of fictional stories or events and their accompanying drawings [for example 'Convolutions' pages 362–382, and Plates 75–77]. The process of writing the fictions often established the tone for the history text, allowing more speculative ideas to influence the research. Fiction as design establishes a new tone and structure to history writing, suggesting new avenues of research, and more speculative forms.

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[9] Eugène Atget and Laure Beaumont-Maillet, *Atget Paris,* (trans.) David Britt (Paris: Hazan, 1998); Brassaï, *The Secret Paris of the 30's* [1931-9] (London: Thames and Hudson, 1976), unpaginated.

The project *Redoubling the* Maison de Verre*: Research as Vitrine*, 2010 [Plates 70–73] combines drawings and fiction into a three-dimensional form and was key to suggesting and developing the relationships between them which are taken up through the rest of the thesis. As such it forms the hinge in the design work between the earlier or more sketchy design work and the ensuing modes used. The project maps a route from the city through the building's façade (etched onto a perspex front screen), into the interior section drawn on the inside of a wall mounted vitrine. It is accompanied by a fiction text exploring the interior spaces, interspersed by auction catalogue entries for historic gynaecological instruments which may have been present in the clinic. Here the fiction becomes the entry into the work, the way around it. The later project *Dark Rooms*, 2010 [Plates 93–94] takes up some of the same elements, collecting objects from the *Maison de Verre* into glass topped vitrines. The fictional text for these works is even more integral, recorded as voices to be listened to while the vitrines are looked at. These audios developed earlier presentations where I had recorded myself and others reading the fiction texts to create a sense of distance and challenge their subjectivity. They presaged the use of audio in my final chapter, 'Air', and suggested some of the philosophical concerns of air as a medium for transmitting the voice – for capturing something that was otherwise not there.

The other method of working between text and drawing is through the form of the book. Early in the research, I produced folded forms to explore the *Large Glass* as a three-dimensional space, *Collapsed Looking Glass,* 2009 [Plates 33–36] and pamphlets and books to explore the thesis structure [Plates 5, 24–25]. This strand of research culminates in a series of handmade books *Dust Jackets*, 2012 [Plate 118–120]. These explore the routes and details identified in earlier fictions and analytic plans. A cross between models and drawings forming

promenades through the *Maison de Verre*, they are to be read as vertical sections rather than horizontal plans.

Two of the projects discussed earlier, *Redoubling the* Maison de Verre*: Research as Vitrine* and *Dark Rooms*, as well as the earlier *The View from Here: Double-sided Map, Paris 1931*, 2009 [Plates 19–21], were made for exhibition but the majority of my work, including those pieces, are not intended for public reception on their own, and should be comprehended both with the other design works and the thesis text. In this I am undoubtedly influenced by my understanding of Duchamp's practice as an ongoing iterative set of parts which circle around similar themes. Individual items only really make sense against the collection as a whole and the notes, texts and statements that underpin them. My thesis is a body of work where the text and the designs, particularly in the part-architecture chapters 'Glass', 'Dust' and 'Air', are interwoven and need each other to exist meaningfully.

Having said this, there is a sense of progression in the design work. The redrawn plan has continued to be honed as an iterative tool analysing the flow of the building's spaces and the experiences they suggest. The fiction writing and the ensuing audio works, which straddle fact and fiction, develop as significant aspects of my research method. Further, certain projects work successfully as culminations to the design research as a whole. Firstly, the dusting project, *A Manual for Sweeping the* Maison de Verre, 2010 [pages 493–524] was a new approach to scouring the building itself for its lost history in the form of dust. The playful yet powerful stupidity of casting oneself in the role of cleaner and analysing dust challenged my former visual approaches. I recorded the sound of sweeping, which set up ideas for the later audio pieces. Secondly, in the *Air Cast* writings, 2011, fictions take the shape of a room and are printed in pastel inks [Plates 126–128]. These explored the invisibility of particular spaces in the *Maison de*

Verre, made palpable by combinations of voices, smells and climactic changes and suggest a more three-dimensional form of writing. Thirdly, the last audio pieces took the shape of plans of rooms *Mouthing Transcripts* [Plates 130–131] and were then recorded in the tiny telephone booth at the *Maison de Verre* and captured inside handmade box-like books [Plates 130–132]. These works marry fiction, audio and the book, successfully taking the text off the two-dimensional page and projecting it into space.

These modes of working, fiction, audio and book works as design, which I will carry beyond the thesis, become important examples of the way part-architecture uses design to do the work history/theory writing cannot. They present ways in which the history/theory model of research can be extended not for the sake of creativity alone but to allow creativity to question and expand on the limits of knowledge.

Thesis outline

The thesis has three parts. 'Part I' consists of the chapter 'Background', which begins with the history and theory contexts to the *Maison de Verre* and the *Large Glass*, and then describes Paris in the first third of the twentieth century with particular regard to the status of women. This ends with an exploration of procreative restrictions and Dr Dalsace's own history as a progressive research gynaecologist.

'Part II' consists of the chapter 'Part-object, Part-architecture', which expands the method of part-architecture, and gives the contexts within which I present my work. In particular I situate myself in relation to projects by the architectural writers Penelope Haralambidou, Jane Rendell, Jennifer Bloomer, Katja Grillner and Katerina Bonnevier. In this chapter, I also expand on my methods of design, and then the critical theories that have informed my work overall, chiefly

Lacan on psychoanalysis, Mieke Bal on narratology, and Carolyn Steedman, Walter Benjamin and Jacques Derrida on the archive and history.[10]

'Part III' is the main body of the thesis and consists of three chapters entitled 'Glass', 'Dust' and 'Air'. In one of the major breakthroughs in the research I identified glass, dust and air as three interrelated materials that physically, thematically and metaphorically shape the *Large Glass* and the *Maison de Verre*. The chapters are structured around each material's physical qualities and presence in the works, a theoretical and metaphorical analysis, and a tracing of the house's inhabitants.

In 'Glass', I begin by establishing that throughout history, progress in glass manufacturing was motivated by the pursuit of transparency. By the turn of the nineteenth century, glass was the ideal material of modernity – the availability of large transparent panes could transform buildings to reveal their formerly unseen interiors to the exterior and vice versa.[11] The essential material to the *Maison de Verre* and the *Large Glass*, their

transparency is a sign of modernity, a revelation. On the other hand, their use of glass illustrates its inherent visual complexities – reflection, translucency, occlusion, fragility. Glass, then, represents both openness and obscurity [figure 1.5].

The chapter then 'surveys' the *Large Glass* in dialogue with that of the *Maison de Verre*. The objects of the *Large Glass*, seen through its transparent glass, explore a narrative both erotic and medical. This informs a reading of the

Figure 1.5: Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art. Detail of glass junctions. Photograph Emma Cheatle, 2010.

[10] Carolyn Steedman, *Dust* (Manchester: Manchester University Press, 2001); Walter Benjamin, 'Theses on the Philosophy of History' [1940], in *Illuminations*, (trans.) Harry Zohn (New York: Schocken, 1988), 253–264; Jacques Derrida, *Archive Fever: A Freudian Impression*, (trans.) Eric Prenowitz (London: University of Chicago Press, 1996).

[11] Whilst other materials, like concrete, are important to modern construction, they are arguably not so visually symbolic.

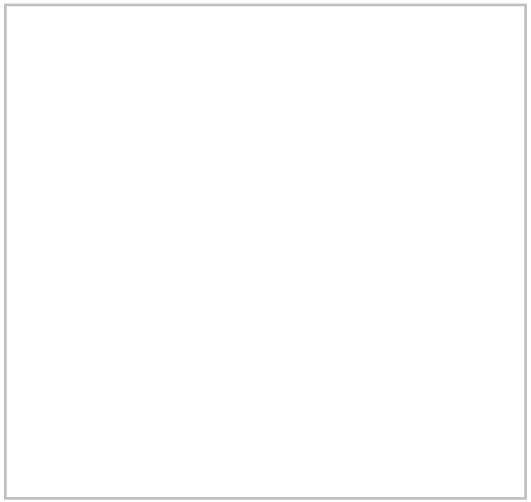

Figure 1.6: Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art. Detail of dust Sieves. Photograph Emma Cheatle, 2010.

Maison de Verre as a vitrine of objects, both physically present and absent, which reflect changing female sexuality in the early twentieth century.

Lastly, I contrast this with an investigation of the translucency of both works. The *Large Glass*, despite displaying the body on glass, does so opaquely resisting clear figures and readings. The *Maison de Verre*, veiled by its walls of translucent glass, challenges modernity, hiding its progressive yet ambiguous inhabitations. This part of the chapter reappraises the meaning of this ambiguity.

The chapter 'Dust' initially reviews the composition of dust as a mixture of building materials and body slough. By the early twentieth century it was a newly classified material in buildings due to its mechanised removability. Physically collected onto the *Large Glass* for about six months as *Dust Breeding*, a register of passing time, Duchamp permanently fixed the dust as the Sieves [figure 1.6].[12] At the *Maison de Verre*, dust has an unwitting and ongoing presence as particles attracted to the interior concave surfaces of the glass lenses and other intricacies of the building's details, and as ancient smears and flecks in the clinic. It has infiltrated the building, causing fragility, threatening ruin – a symbol of death and decay.

'Dust' then notes that many aspects of the *Maison de Verre* remain unrecorded and mysterious: the design of the building, the objectives of the clinic and the inhabitations of it are indefinite. Composed of the body's leftovers, dust serves as a metaphor for these. Though homogenous and uncertain, it is an index to past activities – a history. I propose that the building itself is a vessel containing dusty clues read as a sign of its visitors. Dust here is primarily a female symbol. Dusting is enacted by the female cleaner, and it is the bodies of female patients

[12] Duchamp left the glass horizontally to collect dust for a number of months. The results were captured by Man Ray in the photograph *Dust Breeding*, 1920 [Plate 80, page395].

that remain completely unrecorded. Further, although dust can be collected and magnified for its composition, it can only be fully interpreted through imagination. Dust is therefore also a metaphor for fiction. In the final part of the chapter, new projects – written and drawn, factual and fictive – are made on three of its female occupants in the 1930s. Here, I argue for the possibility that Mary Reynolds, Duchamp's long term lover, visited the *Maison de Verre*.

In the final chapter 'Air', I evaluate Paris as a city of fresh air. With transparency a means to open up buildings, I propose that it is air – the allure of ventilation – that is the true motif of modernity. Duchamp suggests in his notes to the *Large Glass* that a system of 'Illuminating Gases' forms the (invisible) communications between Bachelor and Bride [figure 1.7]. The *Maison de Verre* is likewise run on a system of controlled ventilation through its free-plan.

Secondly, I look at air as the fluid filling the space between solid materials – the continuous invisible medium through which we live. Forming a theory from Duchamp's notions of the 'infrathin' and Luce Irigaray's work, I determine air as a haptic state between, an agency for the transmission of the non-visual.[13] This felt presence of air makes what I call 'Air Cast' spaces in the *Maison de Verre*, which operate as compositions of atmosphere, sound, tension, ambience, scent, colour and decay. In the final part of the chapter, I look at the transmission of the voice as a bringing forth of the past. Through spoken audio works, an architecture of sound is proposed.

Each chapter re-situates the *Maison de Verre* in recognition of the *Large Glass*, and in doing so makes new interpretations of both. I suggest that the *Mai-*

Figure 1.7: Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art. The casting of air by the Bachelors. Photograph Emma Cheatle, 2010.

[13] Duchamp, *Marcel Duchamp, Notes* (1980), (unpaginated). Duchamp's *inframince* is translated as infrathin or infra-slim, and appears variously as one word, two or hyphenated. Luce Irigaray, *The Forgetting of Air in Martin Heidegger*, (trans.) Mary Beth Mader (London: Athlone, 1999).

son de Verre registers the changing history of women's domestic and maternal choices, and that the *Large Glass* is a history constructed as a partial architecture, which suggests the momentary spatial habitation that occurs between the courting Bride and Bachelor yet resists, at all costs, completion and hence the setting up of a home. Both these sets of readings make additions to existing scholarship. In the case of the *Maison de Verre* my work is critical of existing histories and theories which address the form of the building alone.[14] It addresses this lack by reclaiming the building as a piece of female social architectural

[14] See Reyner Banham, *Architecture of the Well-Tempered Environment* (Chicago: University of Chicago Press, 1969), 163–168; Manfredo Tafuri and Francesco Dal Co, *Modern architecture/2*, (trans.) Robert Erich Wolf (London: Faber and Faber Limited, 1986), 233–34; Nikolaus Pevsner, *An Outline of European Architecture* [1943] (Harmondsworth: Penguin,1985); Siegfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History* [1948] (Harmondsworth: Penguin, 1985); Charles Jencks, *Modern Movements in Architecture* [1973] (Harmondsworth: Penguin, 1985). Kenneth Frampton, *Modern Architecture: A Critical History* [1980] (London: Thames and Hudson, 1985); Kenneth Frampton, 'Maison de Verre', in *Arena,* 81/901 (1966), 257–262; Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 77–125; Kenneth Frampton, 'Pierre Chareau. An Eclectic Architect', in Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 235–248; Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992); Yukio Futagawa (ed.), Bernard Bauchet and Marc Vellay, *La Maison de Verre* (Tokyo: A.D.A. Edita, 1988).

history.[15] In the case of the *Large Glass* my work provides important and unique spatial readings.[16]

As stated, the thesis develops these ideas through the mode of part-architecture. The results – the chapters 'Glass', 'Dust' and 'Air' – become prototypes for part-architecture as a method of working. They demonstrate examples of ways in which history and design become parallel modes of scrutiny and proposition to recover the missing aspects of history, especially where the limits of archival material might form a barrier to extending the research further. Part-architecture is, importantly, a response to subjects I identified were missing from the existing writing on the *Maison de Verre*, yet are inherent in the building's programme and spaces. These, its spatialisation of sexuality, relationships and the roles of women, are readily set up in the *Large Glass*. Part-architecture, then, might be considered a feminist method for researching, unpicking and imagining formerly marginalised subject matter and its relationships to analogous contexts.

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[15] In this it sits in the context of and further extends research by Christopher Wilson, 'Looking in/at/from the Maison de Verre', in Hilde Heynen and Gülsüm Baydar (eds.), *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (London: Routledge, 2005), 234–251; and Sarah Wigglesworth, 'Maison de Verre: Sections through an in-Vitro Conception', in *Journal of Architecture,* 3/3 (1998), 263–286; Sarah Wigglesworth, 'A Fitting Fetish: The Interiors of the Maison de Verre', in Iain Borden and Jane Rendell (eds.), *Intersections: Architectural Histories and Critical Theories* (London: Routledge, 2000), 91–108.

[16] In particular my work on Duchamp is in dialogue with and makes additions to the thinking of Rosalind E. Krauss, 'Where's Poppa?', in Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993), 433–462; Rosalind E. Krauss, 'The Story of the Eye', in *New Literary History*, 21/2 (1990), 283–298; Krauss, *The Optical Unconscious* (1994); Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977); Amelia Jones, *Postmodernism and the En-Gendering of Marcel Duchamp* (Cambridge; New York: Cambridge University Press, 1994); Dalia Judovitz, *Unpacking Duchamp: Art in Transit* (London: University of California Press, 1998); and Juan A. Ramirez, *Duchamp: Love and Death, Even* (London: Reaktion Books, 1998)

Part-architecture has wider possibilities as a contemporary method of architectural scholarship. It offers ways of reviewing a range of spatial situations which suggest marginal subjects such as gender, sexuality, class, or practices such as cleaning and birthing. It realises its potential as a method when the limits of archival material are reached, whether through absences in the selection, repression or the fact that memory and subjectivity cannot be archived. It then suggests different or experimental forms of writing and designing, and ways in which theory and design might cross-relate and cohere. Part-architecture proposes that architectural history research, rather than being circumscribed by its perceived limits, uses design research to expand it into an original form of critical and creative enquiry.

Note on Layout

The history and theory text in this document is printed double-sided on the inner half of each page in Arial Narrow 11pt. Accompanying illustrative or informative images appear as figures on the outer half of each page. My design work and fiction writing are positioned as interludes to the history and theory text, either as single pieces or as larger projects, and use the font Didot 9pt.[17] The fictions are double-sided texts with differing layouts on the page. My design projects appear as single-sided coloured ‘plates’.

[17] Named after the French typeset design family of the late eighteenth early nineteenth century.

PART I

2 Background

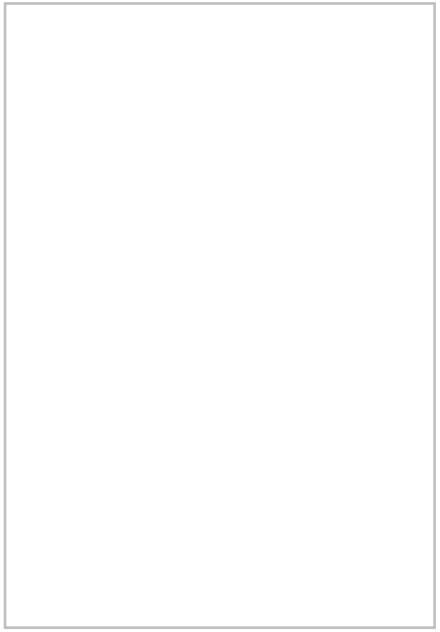

Figure 2.1: François Koller, *Rain in Paris*, 1930.

The *Maison de Verre* was completed in Paris in early 1932, the *Large Glass* some years earlier in New York, in 1923. But these locations and dates do not give the whole picture. Original surviving plans show that the building was conceived as early as 1927, the year the original eighteenth century *hôtel particulier* was purchased.[1] The project started on site in early 1928. Pierre Chareau, the architect, had worked with his clients, Annie and Dr Jean Dalsace, on their former apartment in 1919. The *Maison de Verre*, constructed piece by piece over four years, resulted in a complex building of numerous materials, parts and details, around many furnishings from the earlier apartment.

Although the *Large Glass* is dated 1915–1923, it was conceived as early as 1912, with the first drawings, notes and paintings made in Paris before Duchamp left for America in 1915 at the beginning of the First World War. He returned to Paris in 1923, stating the *Large Glass* was 'finally unfinished'.[2] Exhibited just once in 1926 at the Brooklyn Museum, it was discovered shattered in 1931 and partially reconstructed, and altered, at Katherine Dreier's house in Connecticut, in 1936. Duchamp made repairs to the intricate paint and leadwork then sandwiched the cracked planes between new layers of glass front and back and remodelled the framing to include an earlier proposed detail of three strips of glass on edge between the upper and lower plane.

I argue, then, that both the *Maison de Verre* and the *Large Glass*, as well as being conceptually and constructionally complex collections of materials and

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[1] These, *Preliminary Plans I* (1927) and *II* (1928), are published in Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992), 30; and illustrated later in 'Dust' [Plates 86–7].

[2] Pierre Cabanne, *Dialogues with Marcel Duchamp* [1971]*,* (trans.) Ron Padgett (New York: Viking Press, 1987), 18; see also Caroline Cros, *Marcel Duchamp,* (trans.) Vivian Rehberg (London: Reaktion Books, 2006), 11.

objects, are temporally overlapping bodies of work. The period of the artwork, 1912–1936 includes that of the building, 1919–1932. Together they span the historic period from the First to the Second World War. Following, this chapter underlays the thesis, giving initial interpretations of the two works in reference to their prevailing written histories, outlining their relationship, and establishing their Parisian context between 1912–1939.

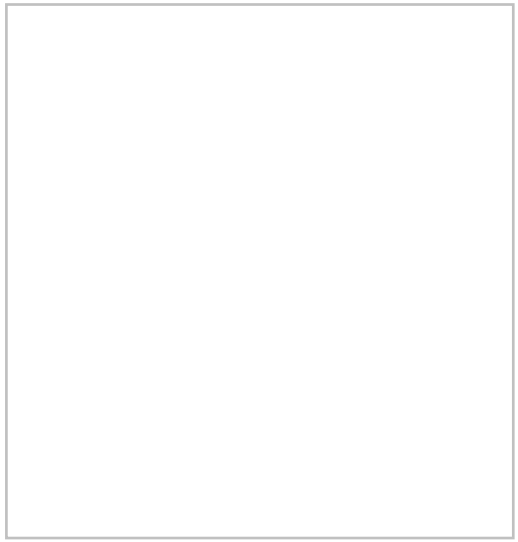

Figure 2.2: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. Photograph Michael Carapetian, 1966.

Throughout the twentieth century, the *Maison de Verre* has been both omitted from and idealised in modernist architectural histories [figure 2.2]. Revered by Reyner Banham and Manfredo Tafuri and Francesco Dal Co, albeit briefly, it is ignored by Nikolaus Pevsner, Siegfried Giedion and Charles Jencks.[3] Despite its omission from his influential 1980 *Modern Architecture: A Critical History*, the historian Kenneth Frampton repeatedly reviews the *Maison de Verre* elsewhere.[4] More recent essays by Sarah Wigglesworth and Christopher Wilson, though accepting the formal descriptions of the building, make useful critical contributions.[5]

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[3] Reyner Banham, *Architecture of the Well-Tempered Environment* (Chicago: University of Chicago Press, 1969), 163–168; Manfredo Tafuri and Francesco Dal Co, *Modern architecture/2*, (trans.) Robert Erich Wolf (London: Faber and Faber Limited, 1986), 233–34; Nikolaus Pevsner, *An Outline of European Architecture* [1943] (Harmondsworth: Penguin,1985); Siegfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History* [1948] (Harmondsworth: Penguin, 1985); Charles Jencks, *Modern Movements in Architecture* [1973] (Harmondsworth: Penguin, 1985).

[4] Omitted from Kenneth Frampton, *Modern Architecture: A Critical History* [1980] (London: Thames and Hudson, 1985), Frampton writes about the building in three essays: Kenneth Frampton, 'Maison de Verre', in *Arena,* 81/901 (1966), 257–262; Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 77–125; Kenneth Frampton, 'Pierre Chareau. An Eclectic Architect', in Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 235–248. Two reviews by others offer in depth accounts: Taylor, *Pierre Chareau* (1992); Yukio Futagawa (ed.), Bernard Bauchet and Marc Vellay, *La Maison de Verre* (Tokyo: A.D.A. Edita, 1988).

[5] See Christopher Wilson, 'Looking in/at/from the Maison de Verre', in Hilde Heynen and Gülsüm Baydar (eds.), *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (London: Routledge, 2005), 234–251; Sarah Wigglesworth, 'Maison de Verre: Sections through an in-Vitro Conception', in *Journal of Architecture,* 3/3 (1998), 263–286; Sarah Wigglesworth, 'A Fitting Fetish: The Interiors of the Maison de Verre', in Iain Borden and Jane Rendell (eds.), *Intersections: Architectural Histories and Critical Theories* (London: Routledge, 2000), 91–108.

They acknowledge the unique programme of the building; position subjectivity and gender into their analysis; and introduce new forms of reviewing it. Wilson proposes a critical visual system for appraising the building, acknowledging the presence and roles of patient and doctor. He does not, though, expand on the social effects of the medical practice. Wigglesworth, whose text I return to below, gives a critical account of the building as a modern clinical intervention.

Here, I present the *Maison de Verre* in several ways. I begin with an overview of the form, then analyse Pierre Chareau's role. I examine the building's reception and representation, particularly referring to Frampton's descriptions of its lack of modernity. I introduce and critique formal suggestions of a correspondence with the *Large Glass*, then suggest new potential to reading both as collections of materials and objects identifying specific past inhabitations.

Form

In 1927 Annie Dalsace's father bought an eighteenth century *hôtel particulier* at 31 rue Saint-Guillaume, in the 7th arrondissement of Paris, for the young Dalsace couple and their family [figure 2.3]. Historically, a *hôtel particulier* was a privately owned, urban, freestanding home for upper class wealthy Parisians, built before the rise of the nineteenth century apartment 'house'.[6] As a typology it was typically composed of a building onto the street, with a quiet courtyard and main house beyond, and a garden to the rear. Annie and her husband, gynaecologist Jean Dalsace commissioned Pierre Chareau to rebuild the main house. To what extent the couple were further financially assisted by Annie's father is unclear,

Figure 2.3: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. The original eighteenth century building from the street. Photograph Emma Cheatle, 2009.

[6] 31 rue Saint Guillaume is a fairly modest version of an *hôtel*.

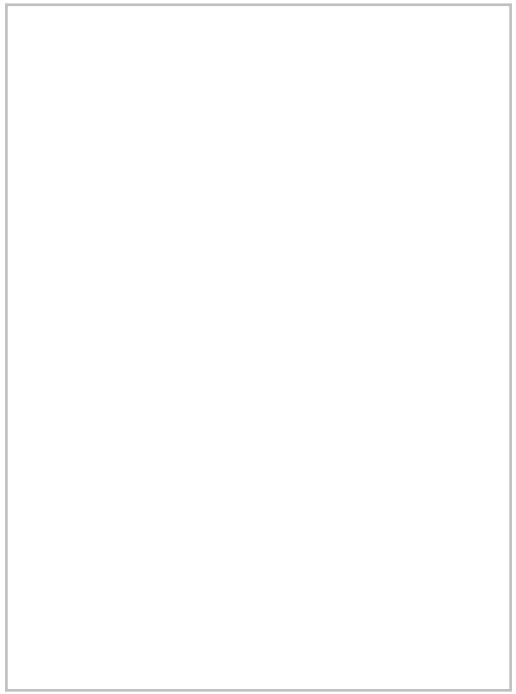

Figure 2.4: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. The inserted structure during demolition, from (**top**) and rear (**bottom**). Photographer unknown.

although the building's cost of four million francs suggests his wealth a contributing factor.[7]

In 1927 the main house was arranged as a number of apartments. The Dalsaces had planned to demolish the whole thing, but a sitting tenant at the top meant that this apartment had to remain in place, propped-up, while a new insertion was built underneath [figure 2.4].[8] The resulting project, therefore, was an infill composed of a column and beam structure, allowing vertical and horizontal freedom in the plan. Partitions were made by fixed furniture-like elements forming screens to spaces. The external front and back walls were constructed as curtains of glass to the internal structure, with 91cm wide panels whose structural rhythm is continued internally.[9] Although usually described as a house, the ground floor predominantly consists of the doctor's suite of gynaecology rooms, with the family home occupying the two floors above [figures 2.5–2.6]. A projecting wing at the front accommodates the servant quarters. A single entrance to the front of the building is shared by the family, patients, visitors, servants and tradesmen. The whole was not visible to the rue St. Guillaume, tucked behind the street building [figure 2.3, 2.5].

[7] The value of old French francs was a hundredth of the new franc introduced in 1960. According to Vladimir Krasnogor, http://www.trussel.com/maig/franc.htm#list, 1000 FF in 1931 was worth about US$ 40, which would now be about US$ 1000 at 5% per year inflation. That would mean 4 million FF is worth about US$ 4 million today.

[8] This was reconstructed in the 1950s before Jean and Annie Dalsace, somewhat ironically, moved into it.

[9] See Futagawa (ed.), *La Maison de Verre* (1988).

Pierre Chareau

> 'Tell me I have battled like a lion for your house. Your house I'll cherish closest to my heart.' ['Pour votre maison, je garde les premiers battements de mon coeur.'].[10]

Chareau, for this project, worked with Dutch architect Bernard Bijvöet.[11] He had also been working in collaboration with *artisan* metal worker Louis Dalbet for some time.[12] It is difficult to establish the process by which these three men built the *Maison de Verre* – Chareau had little experience designing at this scale. It would be surprising if such a detailed, wrought building was made without hundreds of drawings, yet only a few original drawings exist and there is little evidence that Chareau used drawings or models as a tool for developing his ideas. Frampton writes: 'Three preliminary studies […] in the form of perspective drawings do exist. Apart from these, however, no original design drawings seem to survive, and indeed it is now known that very few drawings were ever made.'[13] He goes on to say: 'These naive drawings are the only evidence we have as to the

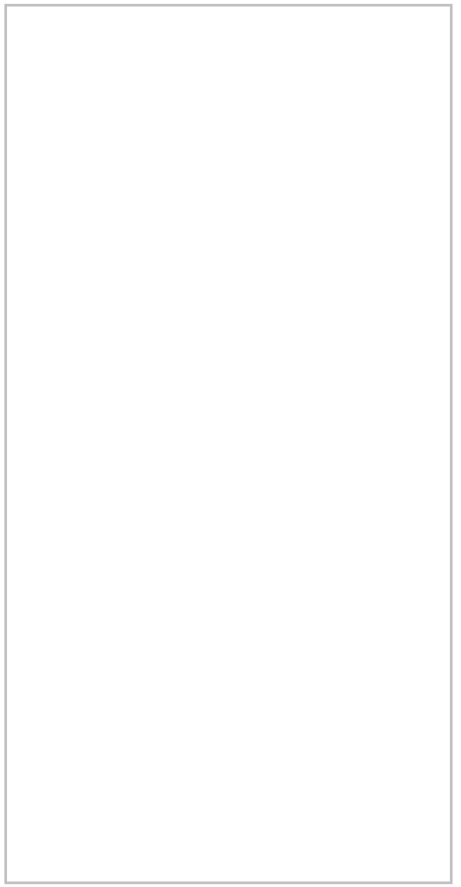

Figure 2.5: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. Site plan with courtyard (2) and garden to rear (10). Drawing by Bernard Bauchet.

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[10] Pierre Chareau, June 13, 1932, letter to Annie Dalsace, cited in Vellay and Frampton, *Pierre Chareau* (1985), 9. It is hard to translate the French 'je garde les premiers battements de mon coeur' which means literally 'I keep the first beats of my heart'.

[11] For more on Bijvöet see Robert Vickery, 'Bijvöet and Duiker', in *Perspecta*, Vol.13 (1971), 131–161.

[12] Frampton mistakenly calls Dalbet an *artisanat* which, in French, is the noun for 'crafts'. See Frampton, 'Maison de Verre' (1966), 262, note 2. He also likens Dalbet to Gerrit Reitveld, 'Maison de Verre' (1969), 78. Chareau had been working with Dalbet as early as 1919. According to Taylor, Dalbet was a 'master ironsmith who manufactured art objects in metal. Dalbet's training as a »compagnon de la Tour de France«, his experience and imaginativeness, complemented Chareau's', see Taylor, *Pierre Chareau* (1992)*,* 23 (inverted commas as original).

[13] Frampton, 'Maison de Verre' (1969), 79.

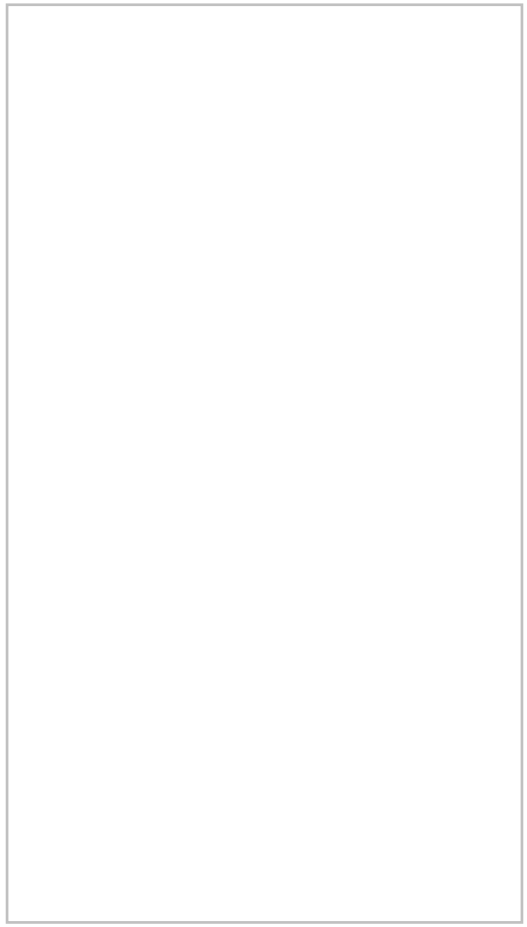

Figure 2.6: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. (**top**) Second floor plan. (**bottom**) First floor plan. Drawings Bernard Bauchet.

nature of its invention and fabrication.'[14] Bijvöet was the more experienced architect but it is unclear what his role was in the design and execution of the building [figure 2.7]. Frampton suggests that he played a major part, implying that Chareau could not operate alone as an architect.[15] This is not backed up by further documentation. Bijvöet did not claim authorship of the *Maison de Verre,* suggested that he had a lot to learn from Chareau, and described Chareau as 'a true, and great architect.'[16] It is thought that the building was built piece-by-piece, probably developed on site, alongside shop drawings by Dalbet for metal elements.[17]

By the time the *Maison de Verre* was completed, Chareau was well known as a furniture designer, and had had substantial experience creating interiors and decorations, as well as several other small buildings.[18] Collaborating also on set designs, and owning a small design shop called *La Boutique*, he was a designer of great breadth and cannot be pinned down to one discipline.[19] His

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[14] Frampton, 'Maison de Verre' (1966), 257. One further sketch drawing, by an unnamed artist, is reproduced in Frampton, 'Maison de Verre' (1969), 117. The three perspectival studies, and two maquettes, made by Dindelaux, and exhibited at the 1931 Salon d'Automne are published in Vellay and Frampton, *Pierre Chareau* (1985)*;* and the plans as mentioned earlier in Taylor, *Pierre Chareau* (1992). I return to these drawings in the chapter 'Dust' [figures 5.17, 5.23, 5.24].

[15] Frampton, 'Maison de Verre' (1969), 80; Frampton 'Pierre Chareau' (1985).

[16] See Vickery, 'Bijvöet and Duiker' (1971), 144. Paolo Mellis, 'Pierre Chareau and the Glass House', in *Domus*, 640 (June 1983), 22.

[17] None of these drawings have survived.

[18] For example a clubhouse at Beauvallon, 1926–27, and the interiors to the Grand Hôtel, Tours, 1927.

[19] For example, in 1923 he worked with Léger on Marcel L'Herbier's film *L'inhumaine*, and worked again with L'Herbier in 1925 on *Le vertige*.

work, small in scale, and immensely detailed, was invariably concerned with domestic interventions for bourgeois interiors. In an architectural context, though, it remains true that the *Maison de Verre* was the only completed building of any size or note.

Frampton's analysis of the *Maison de Verre* is influenced by what he reads as Chareau's lack of confidence as a professional architect, assessing him as 'by temperament and training, more concerned with interiors.'[20] Both Frampton and Wigglesworth point out that Chareau was not formally trained as an architect.[21] This is an odd assertion as many notable architects of the modern movement period became so by other means. For example, Le Corbusier was apprenticed before setting himself up in practice and Adolf Loos notoriously failed various attempts to pass architecture school. Professional architectural training, although existing early in the twentieth century, was not standard. Some simply worked as architects. Ludwig Wittgenstein, for example, designed his sister's house with Paul Engelmann between 1926–29, and from 1933–38 formally registered himself as an architect in the public census.[22]

Frampton and Wigglesworth's concern with professional identity, though, leads them to exclude Chareau from the profession of architecture in order to give a different genesis to the *Maison de Verre*. Frampton seeks to classify the build-

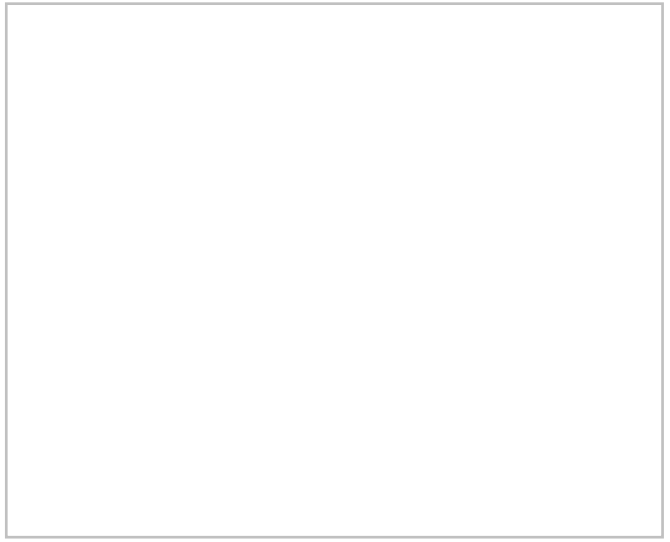

Figure 2.7: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. Façade drawing Bernard Bijvöet, 1931.

[20] Frampton, 'Maison de Verre' (1969), 77. Biographical details can be found in Taylor, *Pierre Chareau* (1992); and Vellay and Frampton, *Pierre Chareau* (1985); Dominique Vellay, *La Maison de Verre: Pierre Chareau's Modernist Masterpiece* (London: Thames & Hudson, 2007). Vellay, Annie Dalsace's granddaughter, gives a biographical description of the Dalsaces, piece by piece, through photographs of the house and two short essays.

[21] Wigglesworth, 'Maison de Verre' (1998), 265; Frampton 'Pierre Chareau' (1985), 235.

[22] W.W Bartley, *Wittgenstein* (La Salle: Opencourt, 1994), 21.

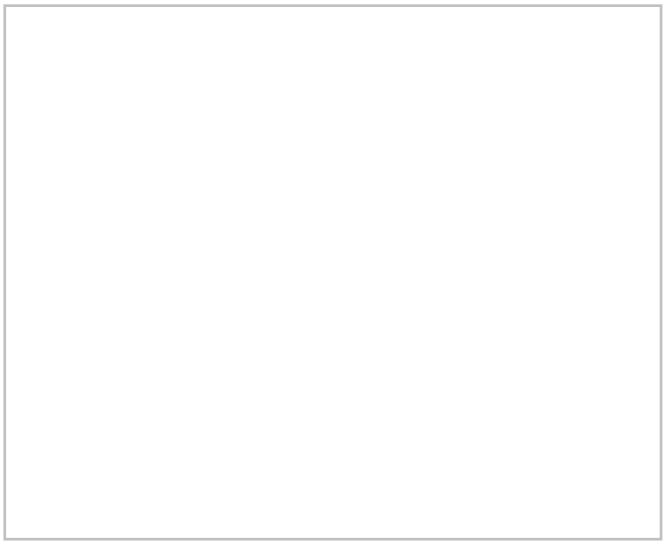

Figure 2.8: Le Corbusier, 'Villa Radieuse', in *Urbanisme* (Paris, 1925).

ing as 'a large piece of furniture'.[23] Having established Chareau as 'not an architect', Wigglesworth charges him with being a 'male technician testing his hypothesis of a new "breed" of building' – the mass-produced house – as the 'measure by which the body of the building is controlled by his actions'.[24] Further, he is a 'gynaecologist' focussed on curing the 'poor health' of the interior of the 'body/building'.[25]

Frampton and Wigglesworth's writing suggests a Corbusian context to Chareau, which conflates the two men. Wigglesworth states that the *Maison de Verre* is a literal evocation of the house as a 'machine for living in', later claiming 'the language of mass production *belies* the reality of the building's […] bespoke, hand-made exemplar'.[26] Likewise, for Frampton it is 'a general prototypical model' yet also 'insufficiently utilitarian'.[27] Further, Wigglesworth states that Chareau has adopted the role of 'scientist', bent on 'eradicating 19th century decay, dirt and congestion' from the city.[28] This recalls Le Corbusier views on Georges-Eugene Haussmann's radical changes to the infrastructure of Paris between 1870–1925. In 1925 he wrote: 'It seemed as if Paris would never endure his surgical experiments. And yet today does it not *exist* merely as a consequence of his daring and courage? […] His achievement was truly admirable […] destroying chaos'.[29] In

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[23] Frampton 'Pierre Chareau' (1985), 245.

[24] Wigglesworth, 'Maison de Verre', (2000), 269.

[25] Wigglesworth, 'Maison de Verre', (2000), 279.

[26] Wigglesworth, 'Maison de Verre' (2000), 263; my italics.

[27] Frampton, 'Maison de Verre' (1969), 83; Frampton, 'Maison de Verre' (1966).

[28] Wigglesworth, 'Maison de Verre' (2000), 263, 269.

[29] Le Corbusier, *Urbanisme* (Paris, 1925), 149.

Wigglesworth's essay, Corbusier's views on the city as dirty and unhealthy seem to be equally attributed to Chareau [figure 2.8].

Chareau and Corbusier were both members of CIAM (Congrès International d'Architecture Moderne) from its inception in 1928. Yet, despite Chareau's interest in the public worth of housing there is no evidence to suggest that Chareau shared Le Corbusier's philosophy on the city or mass production.[30] In urban terms the *Maison de Verre* was a modest insertion which maintained existing eighteenth century city patterns, in complete opposition to Haussmann and Corbusier's views. Although using industrial materials, the building, as Chareau's other works, was small scale, bespoke and expensive. It arose through connections with artistic and craft based practices. Even the mass produced 'Nevada' glass lenses in the façade were manufactured by Saint Gobain especially for the building, the quantity and vertical use unique.

Further, the project came from Chareau's close relationship with his patrons. Frampton describes the Dalsaces as: '"ideal" beyond all expectation. Not only were they intelligent and cultured, but they were also possessed of resources, patience, and considerable courage. Above all perhaps, they were his close personal friends.'[31] Chareau's relationship with the Dalsaces began in 1919 when he designed the interior for a small two-roomed apartment at 195 Boulevard Saint-Germain, incorporating an office space for the gynaecologist.[32] Pieces of furniture designed at this time not only reappear in the *Maison de Verre* but operate as objects around which the new spaces are conceived, as if the furniture and

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[30] There exists only one written piece by Chareau, published in 1935 during the depression, lamenting the diminished role of the 'Architect' in an increasingly commercialised context.

[31] Frampton, 'Maison de Verre' (1966), 258.

[32] Taylor, *Pierre Chareau* (1992), 9.

spaces come together for the first time in a whole ensemble. For example, the baby cot/changing table, Dr Dalsace's desk and chairs, the chairs in the waiting room of the clinic, seem choreographed into the new building.

Rather than a false 'machine for living in', the *Maison de Verre* is a uniquely detailed building emerging from a complex collaboration between Chareau, his clients, Bijvöet and Dalbet, through what Bernard Bauchet calls an 'auto-enriching process'.[33] It reflects the complexity of their cultural, personal and political views in inter-war Paris. It was inhabited for just eight years before, in 1940, Jewish Chareau fled to America and its occupants closed up and emptied the house of its furniture, which would otherwise have been confiscated due to the German practice of 'seizure of Jewish goods.'[34]

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[33] Futagawa (ed.), Bauchet and Vellay, *La Maison de Verre* (1988), 17.

[34] 'The Germans wanted to requisition the Maison de Verre, but they soon realized that they could neither heat it nor light it.' Vellay, *La Maison de Verre* (2007), 146. Pursued by the Gestapo, like many intellectual Jews at the time Chareau fled to New York. He built little there, but contrary to the common belief that he played no part in New York life, he devoted himself to Franco-American activities with the *Free French* week in July 1942, *France Forever* events (organising a reception for Charles de Gaulle in 1944), a canteen called *La Marseillaise*, and numerous conferences. He was also interested in the problems of post war construction. See 'L'École de Paris a New York', in *L'Amour de Art II, Numéro Spécial* (Juillet 1945), 27, 37, 58. In 1946 he designed a modest studio and house for artist Robert Motherwell in East Hampton, Long Island, with a small house for himself on the same four acre site. See Alastair Gordon, *Weekend Utopia* (New York: Princeton Architectural Press, 2001), 48. See also Robert Motherwell, *The Collected Writings of Robert Motherwell* (New York; Oxford: Oxford University Press, 1992), 48.

Modernist Representation

On completion the *Maison de Verre* was positively received by architectural critics as part of the new modernist aesthetic of glass and steel.[35] Despite the family's return in 1945 though, the war marks a break in the representation of the building. Apart from a slim 1954 monograph on Chareau by René Herbst, there is little further reference to the building or architect, particularly outside France, until the 1960s.[36] It is possible that wider interest in the *Maison de Verre* was reawakened by English architect, Richard Rogers. Colin Davis writes: 'In 1959 Richard Rogers visited the *Maison de Verre* and he now acknowledges it as the building that has had the most influence on his architecture.'[37]

Descriptions written after the 1960s imply that the building is self-contained and free-standing, omitting to mention the complexities of the site with

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[35] See for example articles written immediately after the building was finished: *L'Architecture d'aujourd'hui*, 6, (Aug/Sept 1931), 77–83; *L'Architecture d'aujourd'hui,* 3 (Jan/Feb 1931), 64–72; Pierre Vago, Paul Nelson and Julien Lepage, 'Maison de Verre', in *L'Architecture d'Aujourd'hui*, no. 9, Nov/Dec (1933), 4–15. Reproduced in *L'Architecture d'Aujourd'hui*, no. 289, Oct (1993); 'House for a Doctor in Paris, with Glass Walls', in *The Architect and Building News* (April 13, 1934), 40–43. According to Adam Gopnik mainstream press reactions to the building were derisive, see Adam Gopnik, 'The Ghost of the Glass', in *The New Yorker,* 12 (May 9, 1994), 63.

[36] Articles written between the 1960s and 80s are: Margaret Tallent, 'The Maison de Verre Revisited', in *Architecture and Building* (May 1960), 192–195; Ada Louise Huxtable, 'A House in the Spirit of its Time', in *New York Times* (8 Apr. 1979); Attilio del Comune, 'The 1929 Paris House of Glass', in *House and Garden,* 28/8/283 (Oct. 1973), 144–147; Fernando Montes, 'Maison Dalsace', in *GA Houses,* 46 (Tokyo: A.D.A. Edita, 1977); Cecilia Polidori and Pierluigi Nicolin, 'The Empty House, a Tale of Architecture: Pierre Chareau's "Maison de Verre" in Paris (1928 commissioned)', in *Modo,* 3/18 (Apr. 1979), 25–28; Jean Dupont, 'House of Invention: Maison de Verre in Paris', in *Connoisseur,* 215/881 (June 1985), 26–28.

[37] Colin Davis, *High Tech Architecture* (London: Thames and Hudson, 1988); Richard Rogers (assisted by Ludovic Chazaszcz), 'Paris 1930', in *Domus*, no. 443 (October 1966), 8–20. This has lead some architectural commentators to claim the *Maison de Verre* as a precursor of 'High Tech' architecture.

Figure 2.9: Pierre Chareau, *Maison de Verre,* Paris, 1928–32. Photograph with upper apartment cropped. Photograph from René Herbst, *Un inventeur, l' architecte Pierre Chareau* (Paris: Édition du Salon des Arts Ménagers, 1954), 14.

courtyard and remaining apartment above, and eighteenth century street building masking it. For example, Reyner Banham writes: it is 'an unquestioned masterpiece [with its] façade of glass bricks on its public elevation towards the rue Guillaume.'[38] Manfredo Tafuri states that the building was 'the most original version of the 1925 style […] with two completely glassed in façades cover[ing] the three floors.'[39] Frampton mentions that it is 'flanked on both sides by party walls' but not by the street building.[40] The apartment above was deemed so formally unacceptable that some, Herbst for example, presented photographs of the exterior with it removed [figure 2.9, compare with figure 2.2 or 1.1].[41]

Frampton's work on the *Maison de Verre*, three key essays written between 1966–84, continues to be definitive. In 1966, he presents it as a building of 'formal universality' in the modernist canon.[42] Yet at the end, his assessment, like Wigglesworth's, is somewhat ambivalent. Critical of the underlying aspects which compromise or blur the building's formal completeness or purity, in the 1984 essay he sets out to conclusively establish the marginal status of the building to the modern movement and so demonstrate the reasons for Chareau's lack of broader

[38] Banham, *Architecture of the Well-Tempered Environment* (1969), 163–168

[39] Tafuri and Dal Co, *Modern architecture/2* (1986), 234.

[40] Frampton, 'Maison de Verre' (1969), 79.

[41] René Herbst, *Un inventeur, l' architecte Pierre Chareau* (Paris: Édition du Salon des Arts Ménagers, 1954), 14–15. Most early and ensuing photographs of the front facade try to 'crop out' the apartment. Frampton also criticises the 'imbalance' caused by the access stair to the apartment to the right of the building. Leading to a 'distortion in a volume which was a clear rectilinear roofed over space from forecourt to garden.' Frampton, 'Maison de Verre' (1969), 79

[42] Frampton, 'Maison de Verre' (1966), 257–262 .

success.[43] Writing in the 1984 monograph on Pierre Chareau (published in English in 1985) accompanying a thorough retrospective at the Centre Georges Pompidou, Frampton claims that the *Maison de Verre* demonstrated a '*disjunctive tendency* resolved by a clearly marked opposition between the taste governing the choice of furnishings […] and the inventiveness of the house as a whole'.[44] For Frampton's 'critical modernism' though, this resolution presents a problem leading him to exclude the building from histories of the modern movement.[45] To continue in full:

> 'The Maison de Verre was recognised in its day as a functionalist work and as an integral part of the avant-garde of the Modern Movement […]. Otherwise it has in the main been left out of general works which discuss the Modern Movement […]. The reasons for this strange omission are not hard to find, because, while the Maison de Verre was both functional and machinist, it was hardly a pure example of these approaches. On the one hand, its functionalism exceeded the minimum necessary to satisfy certain material requirements, leading to a certain redundancy in terms of both form and mechanical device. On the other, it was furnished in such a way as to exemplify the homogeneity of the interior and its capacity to assimilate different components of varied origin. In this respect, one would have no doubt mistrusted the non-transparent, but translucent walls and the taste for highly upholstered interiors as in the curtained walls of Dr. Dalsace's study. All these ambiguous characteristics would surely have been

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[43] Frampton, 'Pierre Chareau' (1985), 242.

[44] Frampton, 'Pierre Chareau' (1985), 238, my italics.

[45] For an explication of Frampton's 'critical modernism' see Stan Allen and Hal Foster, 'A Conversation with Kenneth Frampton', in *October*, 106 (Fall, 2003), 35–58.

an anathema to the fresh-air and hygiene cult of the mainstream Modern Movement.'[46]

References to the *Large Glass*

In 1983, a year before Frampton's essay in the Pompidou monograph, Paolo Mellis wrote: 'With his «Maison de Verre» Pierre Chareau produced the «large glass» of architecture, or as Duchamp would have called the work «the house stripped bare by her bachelors even». One only has to substitute for the subject of the «Marieé» that of «Maison» to discover that the title found by Marcel Duchamp for his *magnum opus* «La Marieé mise à nu par ses célibataires, même», perfectly fits this «counter-construction»'.[47] Without reference to Mellis, Frampton makes a further suggestion of a relationship in 1984.

I begin by analysing Frampton as his correspondences are simpler. His suggestion of a relationship is brief and based on what he calls their 'homological' correspondence, that is what he perceives as their common formal origin.[48] He asserts that where Chareau's earlier work reveals 'discordances in style and scale [which] have a Surrealist feel to them', the *Maison de Verre* is more rational and organised by 'paired oppositions and reciprocal relations' – such as natural/artificial light, mind/body (library/dining) and vertical/horizontal (power/heat). Frampton associates this with the split in the *Large Glass* between the 'Bachelor

Figure 2.10: Marcel Duchamp, *Large Glass*, or *La Mariée mise à nu par ses célibitaires, même*, (*The Bride Stripped Bare by her Bachelors, Even*), 1915–23. Philadelphia Museum of Art.

[46] Frampton, 'Pierre Chareau' (1985), 242. Despite the building's appearance now in some modern movement histories – for example, William J. Curtis, *Modern Architecture Since 1900* (Phaidon, 1996); Olivier Boissière, *Twentieth-Century Houses: Europe* (Paris: Terrail, 1998); Richard Weston, *Plans, Sections and Elevations: Key Buildings of the Twentieth Century* (London: Laurence King, 2004) – and its popularity with students and architects, Chareau continues to retain a somewhat marginal status.

[47] Paolo Mellis, 'Pierre Chareau and the Glass House' (1983), 22 (inverted commas as original).

[48] Frampton, 'Pierre Chareau' (1985), 242.

machine' in the lower half and 'Bride' above [figure 2.10].[49] He imagines a formal overlaying of the *Large Glass* onto the section of the *Maison de Verre* [Plate 2]. Coding the Bachelor as male/public and the Bride as female/private, Frampton claims the 'public' gynaecological suite on the ground floor, combined with what he calls the doctor's 'celibacy' (presumably meaning that the doctor does not have sexual intercourse with his patients), correspond to Bachelor, and the second floor 'private' bedrooms to the Bride. The first floor of the building does not overlap with the *Large Glass* so readily so Frampton makes a correspondence by laying it horizontally over the plan. The public areas of the salon (combined with the private study of the doctor) become Bachelor and boudoir, kitchen, and dining room are domains of the Bride.[50]

Frampton also writes that both works are: 'difficult to classify according to accepted genres or common ideologies, [and] this comparison goes much further than the seemingly trivial fact that the two works were based on an obsessional and superfluous use of glass, since the two objects break all the classificatory rules which accord with a traditional understanding of their respective disciplines […] both are "anti-" works', that is they do not fit historical categories or trajectories.[51] For this assertion Frampton takes the accepted view that the *Large Glass* challenges the very notion of painting. His critique of the *Maison de Verre* as anti-architectural is based on several ideas. It is not sufficiently modernist as explored earlier; its prevalence of translucent glass undermines the solid and void

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[49]This simple reading bypasses the complexities of the *Large Glass'* narrative, which I expand on following. Frampton, 'Pierre Chareau' (1985), 238, 241.

[50] All quotes from Frampton, 'Pierre Chareau' (1985), 243. Ascribing the kitchen as Bride is anachronistic as it was the domain of the servant not the 'Bride' of the house. Domesticity was elsewhere in the 1930s home as I argue in my chapters 'Glass' and 'Dust' later.

[51] Frampton, 'Pierre Chareau' (1985), 242–3.

delineation of form; it is a large piece of furniture; and it is ambiguous and homogeneous.[52] Alternatively, Bauchet notes that the building exhibits 'the refusal of architecture for its own sake'.[53]

Despite positing the whole house as 'bachelor machine', Frampton feels it is 'dedicated to the bride.' He supports this by describing the two moments when a 'female' gaze falls on the house: 'the first in the axis of the entrance hall, which appropriately falls under the eye of the nurse who supervises […] the second on the third floor, where the maid's work and control room looks down' onto the salon, bedrooms and down the main stair. Specific views gained by Madame Dalsace, the Dalsace children and the housekeeper provide other moments which he does not describe, and which I draw out later in my chapters 'Glass' and 'Dust'.

In the end though Frampton's assessment appears to wane and he concludes, almost as an apologia:

> '[Although] the relationship (or rather absence of relationship) between *Le Grand Verre* and the Maison de Verre must almost certainly remain as one of the enigmas of twentieth-century avant-garde culture, a comparison of this sort cannot completely ignore certain specific correspondences between the two works […] Chareau was perfectly *au fait* with the vicissitudes of Cubism and Futurism and must therefore without any doubt have had knowledge of Duchamp's *Le Grand Verre*.'[54]

Frampton's readings are formal, based on a simple overlay of female onto female, male onto male, with no discussion of the complex internal relationships the artwork or building suggest. He does not unpick the *Large Glass'* narra-

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[52] Frampton, 'Pierre Chareau' (1985), 242–3.

[53] Futagawa (ed.), *La Maison de Verre* (1988), 17.

[54] Frampton, 'Pierre Chareau' (1985), 245. My underline.

tive nor the nuanced roles of gynaecologist (apart from alluding to his 'celibate' position), patient and Mme Dalsace. The materiality and spatiality of the building and artwork are absent, as is their potential subject matter. The final 'enigma' of the two pieces leads him to go on to categorise the *Maison de Verre* as a 'large piece of furniture' rather than a building.[55]

In contrast, Paolo Mellis' lyrical suggestion that the *Maison* is the *Mariée*, positions the whole house as Bride. He envisages it as a 'glass cage with its surplus of mechanisms and highly complicated devices', bidets, ladders and rotating elements.[56] Being inside it reminds him of Duchamp's statement '"with the sensation of having at last been able to mirror oneself in one's own bachelor status"'[57] Writing that the work is a strange creature: 'with organs of the "house-house" and attributes of the "house-object" […] two-faced and monstrous', it appears to me that Mellis is suggesting it also hides its (female) sexuality.[58] He goes on to say the glass in the *Maison de Verre* is a tool which can 'unmask the labyrinth'.[59] The text is short and itself labyrinthine, and possibly badly translated. Yet he seems to be suggesting what other historians shy away from: that the house – a glass phial, '2000 cu.m of Parisian air' – in housing *and* masking its objects and bodies, houses *and* masks its meaning and its history.[60]

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[55] Frampton, 'Pierre Chareau' (1985), 245.

[56] Mellis, 'Pierre Chareau and the Glass House' (1983), 22.

[57] Mellis, 'Pierre Chareau and the Glass House' (1983), 22. I have not found a reference for this statement.

[58] Mellis, 'Pierre Chareau and the Glass House' (1983), 28.

[59] Mellis, 'Pierre Chareau and the Glass House' (1983), 28.

[60] Mellis, 'Pierre Chareau and the Glass House' (1983), 29. Mellis is referring to Duchamp's *50 cc. Air de Paris*, 1919 as a further metaphor, something I also do in 'Air'.

Figure 2.11: Image from Paolo Mellis, 'Pierre Chareau and the Glass House' (1983), 29.

Provocation

Critics dismissed Frampton's correspondence between the *Large Glass* and the *Maison de Verre***.**[61] On the contrary, I believe there is some basis to a relationship and take Frampton's statement regarding the 'enigma' above as a provocation. His assessment of the building as overlapping with the avant-garde, and as a set of interior parts and components, furniture-like, is partly right. The potential of the correspondence with the *Large Glass* though is not formal but material and narrative based: they both operate as material renderings of a double history of sexual mores.

Both operate around objects. As well as their material fabric – glass, lead, steel, dust – which I contend is not the least bit trivial, they are made from visible fixtures and fittings and implied devices and bodies – gynaecological and domestic.[62] Throughout this thesis I assess these fittings, objects, devices and bodies as reflections of the historical social mores of the spectators, inhabitants and visitors.

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[61] For example: Russell Walden writes, '[The] Grand Verre – that famous glass construction created during the years 1915–23, more commonly known as "The Bride Stripped Bare by her Bachelors, even", this analogy takes us nowhere and one wonders why Frampton persists with this cul-de-sac', Russell Walden, in *New Zealand Architect*, 1 (1987), 21–23. Walden goes on to defend Chareau as an architect.

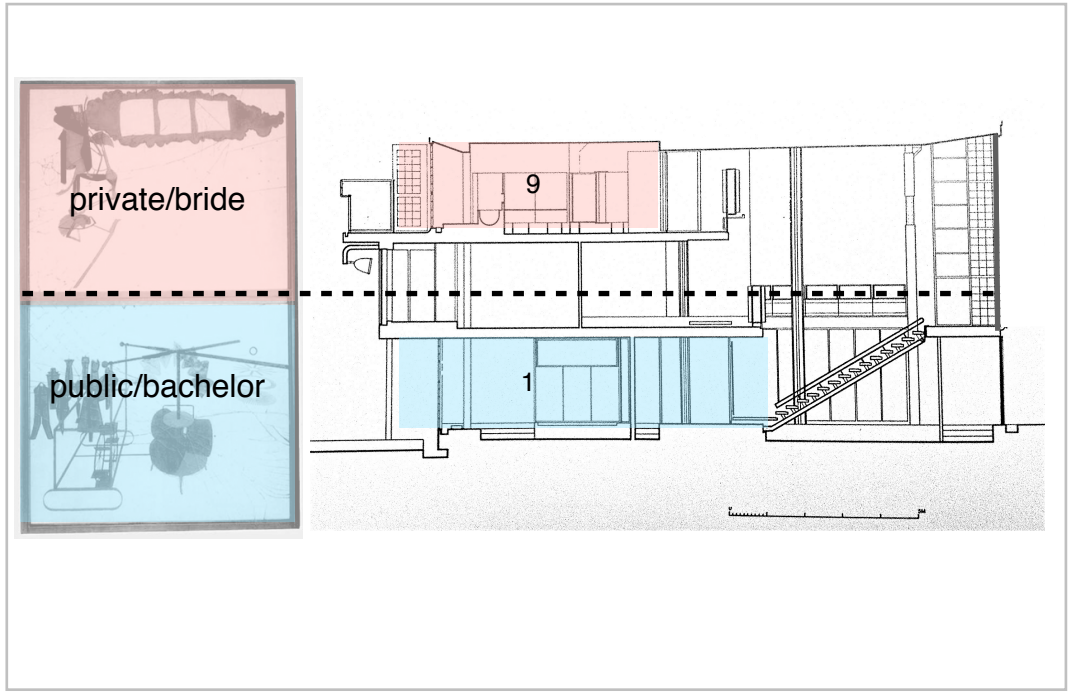
[62] I return to these objects in the chapter 'Glass'.

Plate 2: My analysis of Kenneth Frampton's *Maison/Glass* correspondance. Annotated overlays on plans and sections from Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985).

(**Left**) Pierre Chareau, *Maison de Verre,* Paris, 1928 32. Section[1: Clinic; 9: Bedroom]

Marcel Duchamp, *Large Glass*, 1915 23. (**Right**) Pierre Chareau, *Maison de Verre,* Paris, 1928 32. First Floor Plan. [2: Salon; 3: Dining room; 4: Boudoir; 5: Doctor's study/office; 6/7: void; 8: Kitchen.]

Marcel Duchamp, *Large Glass*, 1915 23.



Here, I position the *Large Glass* to my thesis as a form, narrative and history. It acts upon the spectator through three arrangements – as a lens, a body and a transmission – to develop the relationship between his body and the communication of sexuality. Through the implications of these, I suggest it is a 'given' context and theory to the *Maison de Verre.*

Form

The *Large Glass* appears now in the gallery space as a large framed freestanding window, measuring 177.8 x 277.5 cm [figure 2.12]. The two sheets of glass in landscape format appear to compose a 'picture' on their surfaces. This depicts an enigmatic cast of objects in oil paint, lead sheet and wire, dust, varnish and silver on glass. The lower plane has perspectival forms made from sheet lead strips: making a strange rectilinear sled (Chariot)[63] and a rotating device (Chocolate Grinder), connected by what appears to be a pivoting mechanism (Scissors) [figure 2.13]. Nine organic bodies, or the garments of them at least (the Malic Moulds or Bachelors), collect around the top of the sled. The lead of these forms is painted with brownish and yellow tones. An arc of mottled translucent cone shapes (Sieves), starting off light in colour and becoming darker, arches over the Chocolate Grinder. A series of delicately silvered ellipses (Oculist Witnesses) sit to the right one above the other.

In the plane above, a bizarre hybrid form, again of lead, hangs (the Bride). Half instrument-half organic, she perches against the glass, and from her

Figure 2.12: Marcel Duchamp, *Large Glass*, or *La Mariée mise à nu par ses célibitaires, même*, (*The Bride Stripped Bare by her Bachelors, Even*), 1915–23. Photograph Emma Cheatle, 2010.

[63] The terms in brackets are Duchamp's names for the parts [see figure 2.13].

Figure 2.13: Diagram based on Marcel Duchamp's etching, *Large Glass* completed, 1965. Philadelphia Museum of Art.

mouth (or vagina: I have never been sure which way up she is) billows a horizontal cloud-like shape (Blossoming) with three squarish holes cut out of it (Draughts). The Bride and Blossoming are painted from grey and fleshy pinkish-white oils. The glass across both planes is cracked in a radiating shape mirrored across top and bottom. The cracks appears as filigree cross-sectional lines lacing across the picture plane.

Notes

The *Large Glass* has been variously theorised as holding a specific meaning by different historians, as referred to in the 'Introduction'.[64] I concur with Rosalind Krauss when she suggests that Duchamp's intent was, on the contrary, to proliferate parallel meanings. 'Systems multiply in Duchamp,' she says, 'and they exist side by side quite frequently.'[65] Duchamp was clear that the *Large Glass* should be regarded through the notes and drawings collected in 'The Box of 1914', and 'The Green Box', 1934.[66] As Jean Suquet states 'the machine runs only on

[64] See 'Introduction', note 1, page 20.

[65] Jean Suquet, 'Possible', in Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993), 'Discussion', 127.

[66] See 'The Box of 1914', (trans) Elmer Peterson, 'The Green Box', (trans.) Cleve Gray, 'À l'infinitif', (trans) Cleve Gray, in Michel Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973). Also see Marcel Duchamp, *Marcel Duchamp, Notes* (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980); Marcel Duchamp, *From the Green Box,* (trans.) George Heard Hamilton (New Haven: Readymade Press, 1957); Marcel Duchamp, *Manual of Instructions for Étant donnés : 1° – la chute d'eau, 2° – le gaz d'éclairage* (Philadelphia: Philadelphia Museum of Art, 1987).

words'.[67] He writes that 'The Green Box' gives a sectional view (*écorché*) through the *Large Glass*:

> 'The *Large Glass* hides this voyage triggered by the ascending idée-fixe behind its curtain of transparency, but the Green Box allows us to imagine it step by step, word by word. I have recounted it, word for word, step for step, in ten or so books and pamphlets. You are going to object that the Duchamp of whom I recite once again the conte de faits (tale of facts or factual story), only slightly resembles the individual he was in reality. Surely. He challenged those interpreting his work to go halfway and to invent the rest with their imagination. Duchamp gave us the écorché, and it is up to us to heal its open wounds and, playing like children, to make it function as we see fit'.[68]

The notes on the glass, then, are more than just additive ideas, they both underpin the construction of it and encode how we read. Constantly shifting our attention, they emphasise a story of the Bachelors labouring towards the emission of their 'spangles' up into the Bride, in an ironic unfulfilled love affair.[69]

The *Large Glass* should also be considered against the works that operated as prototypes – *Glider Containing a Water Mill in Neighbouring Metals*, 1913-1915, *Nine Malic Moulds*, 1914-1915, *Network of Stoppages*, 1914 – and another set of related works made simultaneously or later along the same themes – *Fresh Widow*, 1920, *Á Regarder (l'autre côté du verre) d'un oeil, de prés, pendant*

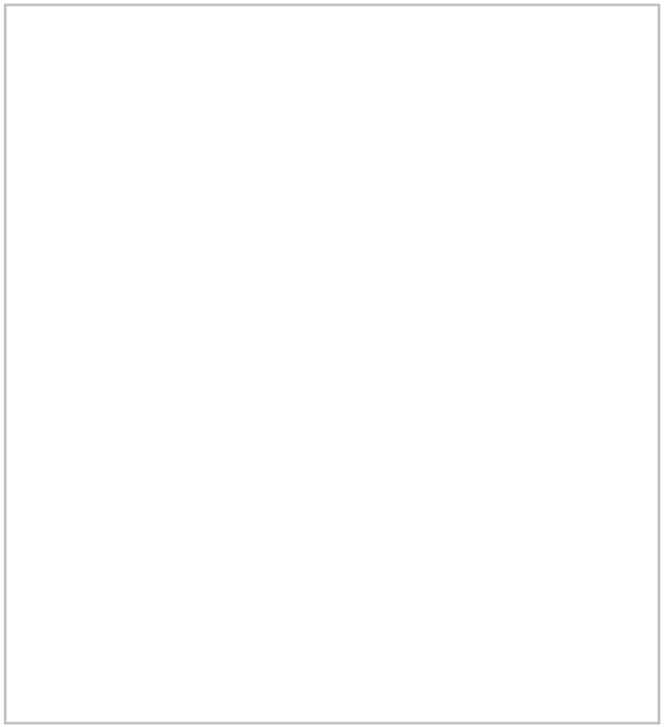


Figure 2.14: Clockwise from top left: Marcel Duchamp, *Glider Containing a Water Mill in Neighbouring Metals*, 1913-1915; *Nine Malic Moulds*, 1914-1915; *To Be Looked at (from the Other Side of the Glass) with One Eye, Close to, for Almost an Hour*, 1918; *Network of Stoppages*, 1914.

[67] Jean Suquet, 'Possible' (1993), 86. 'The Green Box', *Le boîte verte,* is named such to create a *vert* (green), *verre* (glass) and *ouvert* (open) assonance.

[68] Jean Suquet, 'Spiraling', in Marc Décimo (ed.), *Marcel Duchamp and Eroticism* (Cambridge: Cambridge Scholars Publishing, 2007), 28. Suquet explains in a note that *conte de faits* (tale of facts or factual story) is a French pun on *conte de fée* (fairytale or story). *Écorché* also translates as skinned or cutaway and is perhaps also a reference to the naked cut representing the female sex in Duchamp's later work *Étant donnés*, 1946–66.

[69] Duchamp, 'The Green Box' (1973), 49, 50, 53.

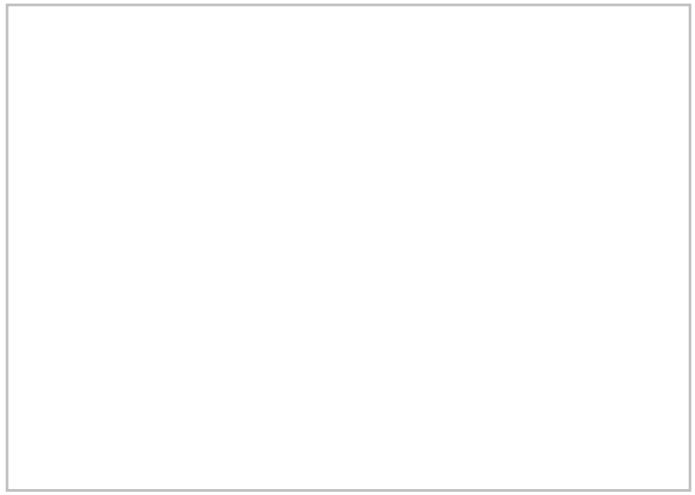


Figure 2.15: Marcel Duchamp, *Les boîtes-en-valises*,1935–41.

presque une heure (*To Be Looked at (from the Other Side of the Glass), with One Eye, Close to, for Almost an Hour*), 1918 [figure 2.14], the 'readymades' *Air de Paris*, 1919 [figure 6.1], *Belle Haleine – Eau de Voilette* (*Beautiful Breath – Veil Water*), 1921 [figure 6.3], *11 rue Larrey*, 1927 [figure 4.24], the erotic part-object sculptures *Objet dard* (*Dart Object*) (1950), *Prière de toucher* (*Please Touch*), 1946 [Plate 48, page 275] and *Les boîtes-en-valises*, the first twenty boxes containing miniature versions of Duchamp's oeuvre constructed from 1935–41 [figure 2.15]. Together, these works form an experimental collection of repeating motifs on the role of vision, the body and the intellectual construction of art. The *Large Glass*, then, is a set of parts – the cast of objects displayed on its glass, the notes, the prototypes and later works – as opposed to a single object.[70]

Duchamp wrote: 'use "delay" instead of picture or painting; picture on glass becomes delay in glass – but delay in glass does not mean picture on

[70] My work on Duchamp also refers to Rosalind E. Krauss, 'Where's Poppa?', in Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993), 433–462; Rosalind E. Krauss, 'The Story of the Eye', in *New Literary History*, 21/2 (1990), 283–298; Rosalind E. Krauss, *The Optical Unconscious* (Cambridge: MIT Press, 1994); Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977); Jean-François Lyotard, *Les Transformateurs Duchamp Duchamp's TRANS/formers* [1977], (trans.) Ian McLeod (Leuven: Leuven University Press, 2010); Dawn Ades, Neil Cox and David Hopkins, *Marcel Duchamp* (London: Thames and Hudson, 1999); Fae Brauer, 'Rationalizing Eros: "The Plague of Onan", The Procreative Imperative and Duchamp's Sexual Automatons', in Marc Décimo (ed.), *Marcel Duchamp and Eroticism* (Cambridge: Cambridge Scholars Publishing, 2007), 126–148; Cabanne, *Dialogues with Marcel Duchamp* (1987); Caroline Cros, *Marcel Duchamp,* (trans.) Vivian Rehberg (London: Reaktion Books, 2006); Amelia Jones, *Postmodernism and the En-Gendering of Marcel Duchamp* (Cambridge; New York: Cambridge University Press, 1994); David Joselit, *Infinite Regress: Marcel Duchamp 1910–1941* (Cambridge: MIT Press, 1998); Dalia Judovitz, *Unpacking Duchamp: Art in Transit* (London: University of California Press, 1998); Juan A. Ramirez, *Duchamp: Love and Death, Even* (London: Reaktion Books, 1998); Calvin Tomkins, *Duchamp: A Biography* (London: Chatto and Windus, 1997).

glass.'[71] His interest was in subverting the direction of painting, and his coining of the term 'anti-retinal' is now well rehearsed.[72] He claimed many times to have turned against the limitations of retinal art, which – with its prioritisation of the visual, the painterly, over what would have formerly been religious, moral, or philosophical visceral content – stunned the viewer into passivity. The retinal cannot disappear per se but, as he stated, 'the retina is only a door that you open to go further', to engage the "gray matter"' or the cerebral cortex.[73] Duchamp's greatest legacy was to acknowledge the spectator, without whom there is no art. In the *Large Glass*, the canvas replaced by glass has a quality of absence, which reconnects eye, body and brain of the spectator.

History

Krauss states: 'The *Large Glass* is of course another self-portrait. In one of the little sketches Duchamp made for it and included in the *Green Box* he labels the upper register "MAR" and the lower half "CEL." And he retains these syllables of his own name in the title of the finished work: *La mariée mise a nu par ses celibataires meme*; the *MAR* of *mariée* linked to the *CEL* of *celibataires*; the self projected as double.'[74] What was the *Large Glass* projecting as an autobiography, in its separation of Bride from Bachelor? In Pierre Cabanne's interviews with Duchamp in 1966, when he was an old man, he says, 'At twenty-five, you were

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[71] Duchamp, 'The Green Box' (1973), 26.

[72] See Cabanne, *Dialogues with Marcel Duchamp* (1987), 43. Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993); Anne d'Harnoncourt and Kynaston McShine (eds.), *Marcel Duchamp* (Munich: Prestel, 1989).

[73] Dore Ashton, 'An Interview with Marcel Duchamp', in *Studio International,* 171 (June 1966), 245.

[74] Krauss, 'Notes on the Index' (1977), 74.

already known as “the bachelor.” You had a well known antifeminist attitude.’ Duchamp replies: ‘No, antimarriage, but not antifeminist. On the contrary, I was exceedingly normal. In effect I had antisocial ideas.’ Cabanne replies, ‘Anticonjugal?’ and the answer is, ‘Yes, anti all that. There was a budgetary question that came into it, and a very logical bit of reasoning: I had to chose painting, or something else. To be a man of art or to marry, have children, a country house …’[75]

Pressed again later, he explains that the *Large Glass* is: ‘above all a negation of woman in the social sense of the word, that is to say the woman-wife, the mother, the children, etc. I carefully avoided all that, until I was sixty-seven. Then I married a woman who, because of her age, couldn’t have children. I personally never wanted to have any, simply to keep expenses down … […] The family that forces you to abandon your real ideas, to swap them for things it believes in, society and all that paraphernalia!’[76] These views had a twofold effect. Firstly, behaving as the irresponsible bachelor, women bore or may have aborted his children – he had at least one, Yvonne Serre (Yo Sermayer), unacknowledged, with married woman Jeanne Serre, in 1911.[77] On the contrary, Duchamp, by not expecting her to marry him, bear his children, or serve him in the home, released a woman to potentially follow a parallel creative life. In the same way he did not want to be tied down he would not subjugate women either. Certain of his

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[75] Cabanne, *Dialogues with Marcel Duchamp,* (1987), 33. At no point does he refer to the existence of the work he has been making secretly for twenty years, *Étant donnés*, 1946–66.

[76] Cabanne, *Dialogues with Marcel Duchamp,* (1987), 76.

[77] Cros, *Marcel Duchamp,* (2006), 114.

relationships, like that with American expatriate and bookbinder, Mary Reynolds, between 1923–42, were seemingly equal and without false expectation.[78]

Explaining the *Large Glass*, Duchamp states: 'I was mixing story, anecdote (in the good sense of the word), with visual representation, while giving less importance to the visuality, to the visual element than one generally gives in painting. Already I didn't want to be preoccupied with visual language.'[79] My theory is that the *Large Glass* is therefore a kind of narrative history, both personal and political. Its glass was the basis of a different approach. The fact that the work was made from afar in New York, I argue, gave him the perspective to comment on the social politics of the Parisian life he had left behind.

This is demonstrated in the notes. The Bride, Duchamp stated, was trapped 'under a glass case or into a transparent cage'.[80] This represented, I believe, the expectations of a society who held her there until a suitable bachelor transported her into a further trap of bourgeois marriage and childbearing. Mimicking a large shop window of the popular department stores the *Large Glass*, then, commodifies the Bride as a ware to be 'bought'. Her own desire and the desires of her (female) friends position her waiting in the frame.[81]

The Bachelors labour below, their sole purpose to produce the Illuminating Gasses, 'spangles' or 'splashes', aimed at inseminating/pleasuring the Bride

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[78] The early part of their relationship was troubled and Duchamp unexpectedly and briefly married Lydie Fischer Sarazin-Levassor in June 1927 (divorced January 1928). By the early 1930s Duchamp and Reynolds' relationship had settled. See my chapter 'Dust'.

[79] Cabanne, *Dialogues with Marcel Duchamp* (1987), 38–40.

[80] Marcel Duchamp, 'À l'infinitif' (1973), 74.

[81] Fae Brauer makes an argument along these lines in Brauer, 'Rationalizing Eros' (2007), 126–148; 141.

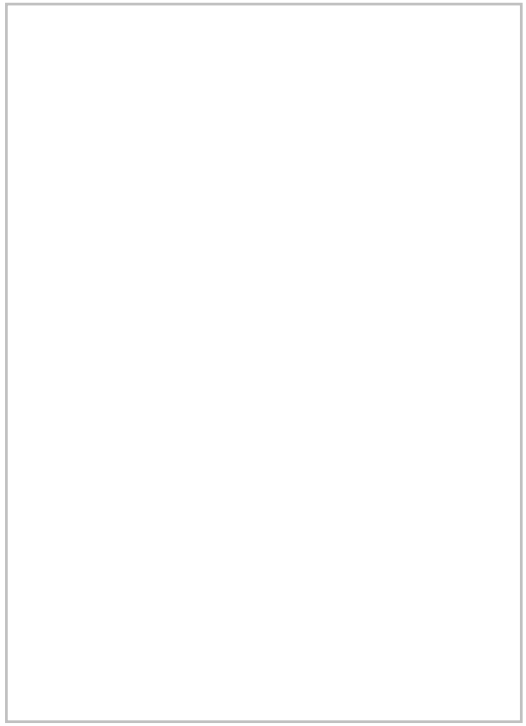

Figure 2.16: Marcel Duchamp, *Large Glass*. Reverse image by Emma Cheatle, 2010.

in the upper plane.[82] Her blossoming though signifies a deferred conclusion to the narrative. The labours of the Bachelors seeking the Bride are thwarted, as the splashes never reach her. The relations of the two remain unconsummated. The Bachelors are forever revolving, the Bride left hanging. Whether this was to do with the unfinished nature of the artwork (Duchamp left off the Ventilator (or Boxing Match) designed to deliver the 'splashes' to the Bride), or by design, as avoided conjugality, or both, is uncertain. As a commentary on Parisian society though the piece has more valence in its inconclusiveness.

As well as this history of unattained conjugality, the *Large Glass* continues to map an experience for the spectator in the present. For Krauss, the sexual intents of the Bride and Bachelor display the 'organic activity within the physical body'.[83] She describes the Bride's blossoming as:

> 'the orgasmic event toward which the whole mechanism of the *Glass* is laboring – as an ellipse with two foci, an ellipse through which the circuitry of the Bachelor Machine connects to that of the Bride. In doing so he [Duchamp] seems to be describing what neurophysiology calls reflex arcs, by which the stimulation of sensory receptors is transferred to the brain […] the Bride is what the Bachelors see [and...] the Bride's "voluntarily imagined blossoming," as she fantasizes the Bachelors' look, connects the reflex arc […] to the source of the impulse to be found in the organs of the Bride.'[84]

In Duchamp moving beyond the retinal to the 'gray matter', there is a transferral of knowledge of the Bride and Bachelor's sexual meanderings to our own organic, corporeal flesh. The *Large Glass* becomes our own story. This arguably occurs

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[82] Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973), 21.

[83] Krauss, *The Optical Unconscious* (1994), 122.

[84] Krauss, *The Optical Unconscious* (1994), 122.

through three arrangements: the surface of the glass as a lens, which stands in for the eye or vision being received; the fragmentation of the body into parts and actions across the glass surface; and the potential transmission of sexual experience. I expand on this in the next three sections.

Lens

Jean-François Lyotard connects the *Large Glass* with the surface of the eye itself: 'the *Glass* is […] an immobile sensitive surface (retina) on which the diverse facts of the story come to be inscribed […] the viewer will have literally nothing to see if he ignores them.'[85] The *Large Glass* in this sense is like a photographic plate in the process of developing, a view expressed by both Krauss and Lyotard.[86] Viewing it as a negative or x-ray turns the transparent parts black making the objects appear missing [figure 2.16]. The objects composed on the plate, due to its transparency, then, operate as inverted *apparitions* in the brain, only rendered visible when the photograph is developed, their transparency turning opaque and the opacity of the glass transparent again. The glass plate mimics our eye-brain connection trying to decode the images. The process seeks to convert the apparition-like objects into the mind and body of the viewer.

Body objects

The apparition-like objects on the glass are body parts with their life or flesh removed, formed from lead, paint and silver and literally through a collection of dust in the Sieves. These create a constellation of body relations rather than physical bodies. On the glass these body parts recall the psychoanalytic part-object, as

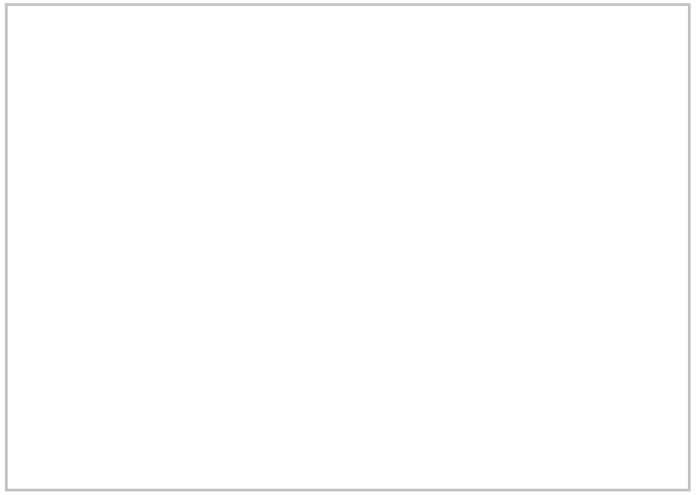

Figure 2.17: Marcel Duchamp, *Étant donnés*, 1946–66. Philadelphia Museum of Art. Photograph Emma Cheatle 2010.

[85] Lyotard, *Les Transformateurs Duchamp Duchamp's TRANS/formers* (2010), 179.

[86] Krauss, 'Notes on the Index' (1977), 75.

defined by Jacques Lacan.[87] The oscillation between the presence of glass as a picture plane, its objects, apparitions and their significance in the brain of the spectator is the very essence of Lacan's definition of the part-object, as an externalised object connecting the body to its memories. The displayed objects further repeat in Duchamp's other works shown above and, ultimately in my view, in the *Large Glass'* later reenactment as *Étant donnés*, 1946–66, his final work made in secret [figure 2.17].

Transmission

The *Large Glass* is an attempted communication of gassy substances between Bachelor and Bride. The Bachelors are merely moulds for forming these Illuminating Gasses; the Bride is filled and floating with Draughts.[88] The narrative suggests that the Illuminating Gasses are a semen replacement which will move along and around the devices of the lower plane before being forced up through a Ventilator to the Bride above. They will inseminate her as well as provide pleasure. This aspect of the *Large Glass* is purely literary, described by the notes rather than displayed visually. Further, two aspects make this communication impossible; the Ventilator was never added to the glass; and the use of glass itself was for its removal of gas (oxygen), Duchamp claiming its anti-oxidative properties preserved paint colour.[89] Ultimately then, the potential communication is stymied.

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[87] I return to the part-object in detail in the next chapter.

[88] Cabanne, *Dialogues with Marcel Duchamp* (1987), 48–9. Duchamp, 'The Green Box' (1973), 49.

[89] Cabanne, *Dialogues with Marcel Duchamp* (1987), 38.

The *Maison de Verre*

This thinking on the *Large Glass* underpins my own equally anti-retinal approach to the *Maison de Verre*. Mellis writes: '«The house stripped bare by her bachelors even» is not however a daring pun, nor is this implied; nor, still less, is it a literary deception with imaginary characters and facts. Rather, it is an unhoped for «Ariadne's thread» with the capacity to guide us through this glass labyrinth better than any critical map drawn in the name of critical architectural genealogies.'[90] The glass in the *Maison de Verre*, he writes, 'can unmask the labyrinth'.[91] I propose that by walking/working through the *Large Glass* and the *Maison de Verre* each becomes the others' readings. The *Large Glass*, composing bodies, apparitions and detritus in a labyrinthine way, indexes the *Maison de Verre*. The *Maison de Verre* is equally a set of mechanisms and objects for reading those of the *Large Glass*. This idea of an inter-connected relationship of objects and histories which work both ways, is pursued throughout this thesis.

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[90] Paolo Mellis, 'Pierre Chareau and the Glass House' (1983), 22.

[91] Paolo Mellis, 'Pierre Chareau and the Glass House' (1983), 28.

I have argued that the *Large Glass*, although not physically constructed in Paris, references Duchamp's understanding of the city's prewar social context. The *Maison de Verre* was physically constructed there five years later between the First and Second World Wars – its clinical functions and practices cannot fail to have been a response to changing interwar politics. Here, I give a brief introduction to the effects of these changes on the position of women. Throughout my thesis I develop the *Maison de Verre* as a specific housing of their social history.

Women in Paris

Mainstream histories present 1920s Paris as hedonistic, a return to what is perceived as the light-hearted *belle époque* of the 1890s and 1910s.[92] Scholarly overviews suggest that there were more complex political issues at stake.[93] For the position of women in the city I refer to a further group of contemporary

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[92] For example Alistair Horne, *Seven Ages of Paris* (London: Macmillan, 2002); Andrew Hussey, *Paris: the Secret History* (Harmondsworth: Penguin, 2006).

[93] See Eugen Weber, *The Hollow Years: France in the 1930s* (London: Norton, 1994); Theodore Zeldin, *France 1848–1945: A History of French Passions, Volume 1 Ambition and Love* (Oxford: Clarendon Press, 1980); David Harvey, *Paris, Capital of Modernity* (London: Routledge, 2003); Éric Hazan, *The Invention of Paris: A History in Footsteps*, (trans.) David Fernbach (London: Verso, 2010); Walter Benjamin, *The Arcades Project*, (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002); Walter Benjamin, 'Paris, Capital of the Nineteenth Century', in *Reflections,* (trans.) Edmund Jephcott (New York: Schocken, 1989), 146–162.

writings.[94]

Although early twentieth century Parisian woman had gained some rights, particularly in the workplace, James McMillan suggests that before 1914 they were ultimately still restricted by poor wages and domestic constraints.[95] Arranged marriage and the inevitability of maternity contributed.[96] Some writers suggest that in this period women inhabiting the streets and working class cafés and bars unchaperoned, were often mistakenly thought of as prostitutes by both men and bourgeois women.[97]

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[94] Histories researching the roles of women include Elizabeth Wilson, *The Sphinx in the City: Urban Life, the Control of Disorder and Women* (Los Angeles: University of California Press, 1992); James F. McMillan, *France and Women, 1789–1914, Gender, Society and Politics* (London: Routledge, 2000); Andrea Weiss, *Paris Was a Woman: Portraits from the Left Bank* (London: Pandora, 1995); Françoise Thébaud (ed.), *A History of Women in the West V. Toward a Cultural Identity in the Twentieth Century* (London: Belknap, 1994); Michael Sheringham (ed.), *Parisian Fields* (London: Reaktion Books, 1996); Debora L. Parsons, *Streetwalking the Metropolis: Women, the City and Modernity* (Oxford: Oxford University Press, 2000); Sharon Marcus, *Apartment Stories: City and Home in Nineteenth-Century Paris and London* (London: University of California Press, 1999); Alison S. Fell, *Liberty, Equality, Maternity in Beauvoir, Leduc and Ernaux* (Oxford: Legenda, 2003); Shari Benstock, *Women of the Left Bank: Paris 1900-1940* (New York: University of Texas Press, 1986); Mary Louise Roberts, *This Civilization No Longer Has Sexes: Reconstructing Gender in Postwar France, 1917–27* (London: University of Chicago Press, 1994).

[95] McMillan, *France and Women* (2000), 167, citing C. Milhaud, *L'Ouvriére en France* (Paris, 1907), 42–43; Harvey, *Paris, Capital of Modernity* (2003), 183–194, citing Jules Michelet, *La femme* [1860] (Paris, 1981); and Marilyn J. Boxer, 'Foyer or Factory: Working Class Women in Nineteenth Century France', in *Proceedings of the Second Meeting of the Western Society for French History*, Vol. II (Austin, Best Printing Company, 1974), 206.

[96] McMillan, *France and Women* (2000), 154. See also Zeldin, *France 1848–1945* (1980), 288.

[97] McMillan, *France and Women* (2000), 201; Alain Corbin, *Women for Hire: Prostitution and Sexuality in France after 1850* (Cambridge: Harvard University Press), 310; Hussey, *Paris* (2006) 330, 297.

Progress for the working classes was very different to that of the bourgeoisie. Working class women were not afforded union rights even after 1918.[98] McMillan argues that despite the worker being asserted as the superior citizen, Marxists failed to support women workers, linked as they were to the falling birth rate.[99] It followed that some French socialists, against the Malthusian (pro-choice) bourgeoisie, also strongly opposed birth control.[100] The working classes, though, were not the probable visitors to the *Maison de Verre*. As Maria Gogh says, 'In the mid-1930s, [the] magnificent double-height *salle de séjour* – walled-in glass from floor to ceiling across its breadth and thus flooded with natural light – is transformed into a salon regularly frequented by Marxist intellectuals and Surrealist poets and artists such as Louis Aragon, Paul Eluard, Jean Cocteau, Yves Tanguy, Joan Miro, and Max Jacob.'[101] Other certain visitors were artist André Breton and writer Walter Benjamin.[102] These men were well-connected and educated, artistic and intellectual, progressive and avant-garde. I have found no references to visitors to the clinic, but speculate that it follows that they were an equally well-

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[98] McMillan, *France and Women* (2000), 163. See also L.Tilly and J.W. Scott, *Women, Work and Family* (London: Holt, Reinhart and Winston, 1978), 123.

[99] McMillan, *France and Women* (2000), 187. Karen Offen, 'Body Politics: Women, Work, and the Politics of Motherhood in France, 1920–1950', in Gisela Bock and Pat Thane (eds.), *Maternity and Gender Policies: Women and the Rise of the European Welfare States, 1880s–1950s* (London: Routledge, 1991), 143, citing E. Herriot, *Créer* (Paris: Payot, 1919); L. Ancelle, *L'Heure de la femme* (Paris: Sansor, 1919).

[100] McMillan, *France and Women* (2000), 187. Also see James F. McMillan, *Housewife or Harlot: The Place of Women in French Society 1870–1940* (Brighton: Harvester, 1981).

[101] Maria Gough, 'Paris, Capital of the Soviet Avant-Garde', in *October*, 101 (Summer, 2002), 55. Also see 55–61. Gough is citing Gopnik, 'The Ghost of the Glass', 63.

[102] Gough, 'Paris, Capital of the Soviet Avant-Garde' (2002), 54–55. Also see Esther Leslie, *Walter Benjamin* (London: Reaktion Books, 2007), 145. Walter Benjamin, *Selected Writings Vol. 2, 1927–34* (trans.) Rodney Livingstone (London: Belknap Press, 1999), 852.

connected set of women.

By 1914, the idea of sexual pleasure had effected, what Alain Corbin calls, 'the eroticisation of marriage'.[103] Post-war, Paris attracted groups of European, African and American emigrés. Many of these, for example Josephine Baker, Ada 'Bricktop' Smith, Ernest Hemingway, Picasso, Benjamin and Frida Kahlo, were artists or intellectuals following lifestyles which blurred former delineations.[104] Feminist writers, for example Andrea Weiss, Shari Benstock and Mary Louise Roberts, demonstrate that ordinary, single, educated women, French and American, not only wore more angular, looser clothing and went out alone, but more importantly lived alone, or openly with lovers, both men and women, and, according to Weiss, eschewed the inevitability of having children.[105]

These women also increasingly pursued careers, often in writing.[106] Autobiographical in content this writing maps a certain kind of female culture in the city and becomes a form of useful historical document.[107] In particular, the

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[103] Alain Corbin, 'Backstage', in Michele Perrot (ed.), *The History of the Private Life*, Volume IV, (trans.) Arthur Goldhammer (Harvard: Belknap, 1994), 598. See also Léon Blum, *Marriage* [1907], (trans.) Warren Bradley Wells (London: Lippincott, 1937).

[104] Jon Kear, 'Vénus noire: Josephine Baker and the Parisian Music-hall', in Michael Sheringham (ed.), *Parisian Fields* (London: Reaktion Books, 1996), 46–70. Weiss, *Paris Was a Woman* (1995), 23.

[105] Weiss, *Paris Was a Woman* (1995), 21; Benstock, *Women of the Left Bank* (1986), 37–38.

[106] Fell, *Liberty, Equality, Maternity in Beauvoir, Leduc and Ernaux* (2003); Anne Sauvy in 'Les Littérature et les femmes', in Roger Chartier (ed), *Histoire de l'edition francaise*, vol. 4, 1900–1950 (Paris: Promodis, 1986), cited by Marcelle Marini, 'The Creators of Culture in France', in Thébaud (ed.), *A History of Women* (1994), 297–323.

[107] See Weiss, *Paris Was a Woman* (1995), 21; Benstock, *Women of the Left Bank* (1986), 26–29; also see Marcus, *Apartment Stories* (1999); Mary Louise Roberts, *This Civilization No Longer Has Sexes: Reconstructing Gender in Postwar France, 1917–27* (London: University of Chicago Press, 1994).

autobiographical fiction of Jean Rhys, Anaïs Nin, Violette Leduc and Colette, in the context of the socio-political plays of Eugène Brieux and novels of Émile Zola, sheds light upon the occupations and concerns of young women in Paris during this time, with detailed and repellent descriptions of hotel living, poverty, unwanted or failed relationships, grief, and abortion in the city's streets, squares, apartments, boarding houses and cafés.[108] Deriving from first hand experience, these documents are, I argue, akin to archival letters or descriptions found elsewhere. In effect one has to enter a fictional text, read between and through it, in the context of other social frameworks, and actively interpret it as one would other

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[108] These texts include Colette, 'Gribiche' [1937], in Elizabeth Fallaize (ed.), *Oxford Book of French Short Stories* (Oxford: Oxford University Press, 2002); Colette, *The Stories of Colette,* (trans.) Antonia White (London: Martin Secker and Warburg Ltd, 1958); Jean Rhys, *After Leaving Mr. Mackenzie* [1930] (London: Penguin, 1971); Jean Rhys, *Good Morning, Midnight* [1939] (London: André Deutsch, 1967); Violette Leduc, *La Batârde* [1965]*,* (trans.) Derek Coltman (Normal: Dalkey Archive Edition, 2003); Violette Leduc, *Ravages* [1955]*,* (trans.) Derek Coltman (St. Albans: Panther Books, 1969); Eugène Brieux, *Three Plays by Brieux (Maternity, The Three Daughters of M. Dupont, Damaged Goods,* (trans.) Mrs. Bernard Shaw, St. John Hankin and John Pollock (London: A.C Fifield, 1911). I also refer to Simone de Beauvoir, *When Things of the Spirit Come First* [1937]*,* (trans.) Patrick O'Brian (London: André Deutsch, 1982); Simone de Beauvoir, *She Came to Stay* [1943]*,* (trans.) Yvonne Moyse and Roger Senhouse (London: Harper Perennial, 2006); Kay Boyle, *My Next Bride* [1934] (London: Virago, 1986); Louis-Ferdinand Céline, *Journey to the End of the Night* [1932]*,* (trans.) John H. P. Marks (London: Vision Press Ltd, 1950); Helen Constantine (ed. and trans.), *Paris Tales* (Oxford: Oxford University Press, 2004); Anaïs Nin, *Incest: From a Journal of Love: the Unexpurgated Diary of Anaïs Nin, 1932-1934* (London: Peter Owen, 1993); Jean-Paul Sartre, *The Age of Reason* [1945]*,* (trans.) Eric Sutton (London: Penguin Classics, 2001); Émile Zola, *Ladies' Delight* (*Au bonheur des dames* [1883]), (trans.) April Fitzlyon (One World Classics, 2008); Émile Zola, *Pot Luck* (*Pot-bouille* [1882]), (trans.) Brian Nelson (Oxford: Oxford World Classics, 1999); Émile Zola, *Nana* [1880], (trans.) Roger Clark (London: Grant and Cutler, 2004). Also see Djuna Barnes, Mina Loy, Nancy Cunard, Gertrude Stein, Nathalie Barney, Irene Nemirovsky, Nathalie Sarraute, Renée Vivien and Jeanne Galzy.

primary material.[109] As partial documents not mistaken for fact, these fictions and autobiographies when cross-referenced to other materials, give a useful understanding of the social politics of the time.[110]

Procreative imperatives

By 1933, the depression a reality, fascism rising, and a new war expected, Paris was precarious.[111] The city was shabby and run-down, many were poor, and the rights of workers and women were, once again, secondary.[112] By the end of the First World War, the French birth rate had been in decline for over seventy years, particularly in Paris. There had been a massive loss of population – 1.5 million French soldiers were killed – followed by the deaths of hundreds of thousands from Spanish influenza in 1918. By 1919, state led procreative imperatives not

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[109] Roberts, *This Civilization No Longer Has Sexes* (1994), 14, refers to the contribution of the novel to the debate on changing gender constructions in Paris between the wars. Many other historians use novels as historical documents, for example, Sharon Marcus, *Apartment Stories* (1999); Franco Moretti, *Atlas of the European Novel, 1800–1900* (London: New York: Verso, 1999); Roger Clark, 'Threading the Maze: Nineteenth-century Guides to British Travellers in Paris', in Michael Sheringham (ed.), *Parisian Fields* (London: Reaktion Books, 1996), 8–29, all use material from Émile Zola's documentary novels.

[110] See for example Dr Madeline Pelletier, *Le Droit d'avortement* (Paris, 1913); Bernard Lecache, *Séverine (Caroline Rémy)* (Paris, 1930); Jacques Bertillon, *La dépopulation de la France* (Paris, 1911); Paul Leroy-Beaulieu, *La question de la dépopulation* (Paris 1913); Robert Michels, *Sexual Ethics: A Study of Borderland Questions* (London, 1914); Blum, *Marriage* (1937).

[111] See Julian Jackson, *The Politics of Depression in France 1932–1936* (Cambridge: Cambridge University Press, 2002); Julian Jackson, *The Popular Front in France: Defending Democracy, 1934–38* (Cambridge: Cambridge University Press, 1990).

[112] Hussey, *Paris* (2006), 330–1; Weber, *The Hollow Years* (1994), 86, citing *Marie-Claire* (5 and 26 March, 28 May 1937) and *Paris-Soir* (6 February 1936). Women did not gain suffrage until 1944.

only strongly opposed freedom regarding procreation, but reinstated the argument that a woman's place was in the home.[113]

Population research had begun in the 1870s and with it arose pronatalist groups.[114] Andrés Reggiani argues that the most active movement established in 1896 was 'rooted in right-wing republicanism', with propositions including 'measures to improve the welfare of family and the child as a way to encourage a higher birthrate and lower infant mortality; to intensify the campaign against abortion; and to morally condemn all sexual activity not conducive to procreation.'[115] In the 1930s, the pronatal movement extended as far as tax incentives and even awards for large families.[116]

In 1920 a statute devised by the government body *Conseil supérior de la natalité* introduced the 'Ignace Law' which not only differentiated the penalties for

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[113] See Angus McLaren, 'Abortion in France: Women and the Regulation of Family Size 1800–1914', in *French Historical Studies,* X/3, (Spring 1978), 461–485; and Angus McLaren, *Sexuality and Social Order: the Debate Over the Fertility of Women and Workers in France, 1770-1920* (London: Holmes & Meier, 1983); Andrés Horacio Reggiani, 'Procreating France: The Politics of Demography, 1919–1945', in *French Historical Studies*, 19/3 (Spring 1996), 725–754; Offen, 'Body Politics' (1991), 138–159. See also James F. McMillan, *Housewife or Harlot* (1981); Ana Cova, 'French Feminism and Maternity: Theories and Policies, 1890–1918', in Gisela Bock and Pat Thane (eds.), *Maternity and Gender Policies: Women and the Rise of the European Welfare States, 1880s–1950s* (London: Routledge, 1991), 119–137; Susan R. Grayzel, *Women's Identities at War: Gender, Motherhood and Politics in Britain and France during the First World War* (Chapel Hill: University of North Carolina Press, 1999); Jane Elizabeth Pedersen, *Legislating the French Family: Feminism, Theater, and Republican Politics, 1870–1920* (London: Rutgers University Press, 2003).

[114] Reggiani, 'Procreating France' (1996), 733.

[115] Reggiani, 'Procreating France' (1996), 730, citing Jacques Bertillon, *Programme de l'Alliance nationale pour l'accroissement de la population française* (1899).

[116] Reggiani, 'Procreating France' (1996), 734, citing Louis Derraigne, *Puériculture sociale, puériculture stérilité, dénatalité* (Paris, 1936), 274.

abortion, already illegal, but included new legislation banning not only contraception but any public information advertising of it.[117] Prior to 1920, abortion legislation was based on the 1810 code (article 317 of the Penal Code). Now the law set different rules for those involved, transferring the crime from the aborting woman to the abortionist who was tried for felony punishable by death. Acquittal was the usual outcome of a trial because juries were, on the whole, sympathetic to the situations involved, thus in 1923 a further law was passed which made 'abortion a misdemeanour subject to criminal courts, and no longer a felony', in order to avoid acquittals and make the crime of abortion punishable.[118] In fact the law had little effect, and the birthrate failed to incline until the 1950s.

Mary Lynn Stewart suggests that middle class women were more informed than working class in sexual matters through organised health and beauty education.[119] McMillan notes that the 'eroticisation of marriage' also brought the 'widespread adoption of birth control'.[120] If bourgeois women and men explored

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[117] McLaren, 'Abortion in France' (1978), 461–485. Offen, 'Body Politics' (1991), 138, 140, 146. Reggiani, 'Procreating France' (1996), 731–2. Pedersen, *Legislating the French Family* (2003), 189. See also Malcolm Potts, Peter Diggory and John Peel, *Abortion* (Cambridge: Cambridge University Press, 1977).

[118] See Reggiani, 'Procreating France' (1996), 731, citing Francis Ronsin, *La grève des ventres: Propagande néo-Malthusienne et baisse de la natalité française (19e et 20e siècles)* (Paris, 1980); Roger-Henri Guerrand, *La libre maternité, 1896–1969* (Paris, 1971). Also see Offen, 'Body Politics' (1991), 138, citing P. Paillet and J. Houaille, 'Legislation Directly or Indirectly Influencing Fertility in France', in M. Kirk, M. Livi-Bacci and E. Szabady (eds.), *Law and Fertlitity in Europe* (Dalhain: Ordina Editions, 1975), 240–73; D.V. Glass, *Population Policies and Movements in Europe* [1940] (London: Frank Cass, 1967), 158–9. For a powerful explication of the effects of motherhood and abortion on two women of this period, one a petit bourgeois, the other working class, see Brieux, *Maternity* (1907).

[119] Mary Lynn Stewart, *For Health and Beauty: Physical Culture for Frenchwomen, 1880s–1930s* (Baltimore, Maryland: John Hopkins University Press, 2001).

[120] McMillan, *France and Women* (2000), 156.

pleasure over duty, working class women equally, mobilised into work by the industrial revolution, were increasingly relied upon to provide income for their sometimes large families: if they could not work due to maternity, starvation followed.[121] Contraceptive choices though – a poorly understood rhythm method, or various barriers such as condoms, douches, pessaries or sponges – remained expensive or ineffective.[122] The highly unreliable *coitus interruptus* was the only widely practised technique of birth control.[123]

Despite the penalties and propaganda, when these methods failed abortion appears to have been the widespread solution. Only several French feminist activists, though – Dr Madeleine Pelletier, Nelly Roussel and Séverine (Caroline Rémy) – fought publicly for the right to abortion, with most in the women's movement remaining quiet.[124] Some historians argue that many women instead made

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[121] Pelletier, *Le droit d'avortement* (1913), 7.

[122] See McLaren, 'Abortion in France' (1978), 467, 468. The rhythm method was popularised by Alexandre Mayer, *Des rapports conjugeaux* (Paris, 1849).

[123] See McLaren, 'Abortion in France' (1978), 465–470. See also Edward Shorter, *Women's Bodies: A Social History of Women's Encounter with Health, Ill-Health and Medicine* (London: Transaction, 1991); George Weisz, 'Mapping Medical Specialization in Paris in the Nineteenth and Twentieth Centuries', in *The Society for the Social History of Medicine* (1994), 177–211; Martha L. Hildreth, 'Doctors and Families in France, 1880–1930: The Cultural Reconstruction of Medicine', in Ann La Berge and Mordechai Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Atlanta: Rodopi, 1994), 189–209; Ornella Moscucci, *The Science of Women: Gynaecology and Gender in England, 1800–1929* (Cambridge: Cambridge University, 1990).

[124] McLaren, 'Abortion in France' (1978), 481. See Pelletier, *Le droit d'avortement* (1913); Felicia Gordon, *The Integral Feminist: Madeleine Pelletier 1874–1939* (Cambridge: Polity Press, 1990); Lecache, *Séverine* (1930), 88–89. They were supported by several doctors: Dr E. Toulouse, *Les conflits intersexuels et sociaux* (Paris, 1904); Dr Courtault, *Pourquoi l'avortement précoce doit être médicalement libre* (Paris, 1909); Pedersen, *Legislating the French Family* (2003), 166–170.

a ‘domesticated’ response.[125] One commentator wrote in 1911 ‘There are also many cases in which women abort themselves. Nothing is easier, moreover, and they know very well how to find out from each other.’[126] Advice on the techniques and of those who would perform abortion seemingly passed by word of mouth from one woman to another.

Many avant-garde women admitted later to covert terminations. In 1971, three hundred and forty-three French women signed the ‘Manifesto 343’ claiming they had had an illegal abortion between 1920 and 1970. Many of these, including Simone de Beauvoir, Violette Leduc, Françoise d’Eubonne, Marguerite Duras and Agnès Varda, were writers of the 1920s and 30s. They make clear in their writing the necessity of liberation from the ‘shackles’ of childrearing and the continuing confines of bourgeois domesticity.[127] No true figures exist, as the act of abortion was so criminalised, yet one 1935 writer, Pierre Bassac, ‘estimated abortions and legal births to come out roughly even’.[128] A 1937 report by the President of the Superior Commission for the Birthrate stated ‘“It is estimated that the figures [for abortion] range between 300,000 and 500,000 per year … and I believe the latter figure is closer to the truth.”’[129] Some government sources evaluated that in 1930

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[125] See Reggiani, ‘Procreating France’ (1996), 728. See also Harvey, *Paris, Capital of Modernity* (2003), 193.

[126] Huburt Legrand, ‘Deux mots sur les avortments criminels’, in *Revue professionelle des sages-femmes* (Feb. 1911), 101, see McLaren, ‘Abortion in France’ (1978), 475.

[127] The full list is at http://tempsreel.nouvelobs.com/actualite/societe/20071127.OBS7018/le-manifeste-des-343-salopes-paru-dans-le-nouvel-obs-en-1971.html. Autobiographical material by women writers backs this up. I return to this in the chapter ‘Dust’.

[128] Weber, *The Hollow Years* (1994), 79, citing Pierre Bassac, *La fécondation volontaire:une révolution dans la vie sexuelle* (1935), 163.

[129] Potts, Diggory and Peel, *Abortion* (1977), 90.

as many as 300,000 abortions per 500,000 live births were being performed each year.[130] One source cites Dr Jean Dalsace: 'In towns it was thought at this time that there were more abortions than live births and in Paris Dalsace put the ratio at 125 abortions to 100 live births.'[131] Another suggests Dalsace put the figure at 800,000 in 1932.[132] Angus McLaren cautions that exaggerations may have occurred because the government opposed all forms of fertility control and wanted to shock the public. Abortion was viewed by anti-feminist figures as a selfish, anti-social act by women. Equally, pro-abortionists cited the same figures, arguing that the legalisation of contraception and abortion would ensure control and safe practice.[133] Either way, the figures were undoubtedly high.

A range of people, professional and amateur, and of varying repute and skill, practiced abortion, and, despite safe techniques being well known, only the wealthiest and well connected classes could access them. Dr G. Lepage wrote in 1917, 'In 1913 the 200 women at the *hôpital Boucicault* who admitted to having had an abortion declared that the operation had been carried out in thirty-nine cases by midwives, in seventy-seven by doctors or medical students, in three by pharmacists, in twelve by herbalists, in twenty-four by nurses, in twenty-one by

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[130] Potts, Diggory and Peel, *Abortion* (1977), 91.

[131] Potts, Diggory and Peel, *Abortion* (1977), 90–91. The authors are citing Anne-Marie Dourlen-Rollier a colleague of Dalsace; see Anne-Marie Dourlen-Rollier, *L'Avortement en France* (Paris: Librairie Maloine, 1967); see also Roland Pressat, 'Sur le nombre des avortements en France' in *Concours Medical*, 14, (1966).

[132] Préfecture de Police Dpt. BA 2235, Report of December 30, 1932.

[133] See McLaren, 'Abortion in France' (1978), 479.

the women themselves, and in seventy-four cases by non-medical personal.'[134] A large proportion were 'started' by amateur *faiseuse de anges* or *femmes sages* (midwife) who either injected soapy water, installed probes, knitting needles, or other devices into the cervix. Women then admitted themselves to hospital in varying conditions – often losing blood or badly infected – for completion of termination, as vividly described by Leduc.[135] Serious complications were common (injuries, infections, bleeding), sometimes with fatal consequences, doubling the implication of the English translation of *faiseuse de anges* as 'maker of angels.'[136] To escape repercussions, many women would claim to be miscarrying naturally. Others hid the problem.

A graphic description of the latter can be found in physician and novelist Louis-Ferdinand Céline's semi-autobiographical *Journey to the End of the Night.* After the war Ferdinand returns to Paris to practice as a doctor. He is called to a young woman's house by her mother. He knows the woman and knows she has already had three 'miscarriages' at three months each. She is bleeding profusely and catatonic, and the mother is only concerned for the shame it will bring them. Ferdinand suggests she should go to the hospital. The mother refuses. Ferdinand says, 'I hung my head and discovered a little pool of blood forming under the girl's bed and a trickle threading slowly along the wall to the door. A drop fell regularly

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[134] Dr G. Lepage, 'A propos des avortement criminels à Paris', in *La revue philanthropie*, XXXVIII (1917), 493. See McLaren, 'Abortion in France' (1978), 473. Jean Sutter's review in 1947 puts the figures just as high. Jean Sutter, 'Résultant d'une enquête préliminaire sur avortement dans la region parisienne', in *Population*, 2e année, no. 3 (1947), 515–532.

[135] Leduc, *Ravages* (1969), 394–427; and Leduc, *La Batârde* (2003), 368–369. I return to Leduc's experiences in 'Dust'.

[136] See Felix Allemane, *L'Avortement criminel* (Carcassone, 1911), 121; McLaren, *Sexuality and Social Order* (1983), 143.

from the mattress. Plop. Plop'. Despairing he watches helplessly. The girl's breathing slows, the mother still won't listen as he tells her again to take her to hospital. He leaves knowing she will die.[137]

Jean Dalsace and the *Maison de Verre*

The 1931 *Cook's Traveller's Handbook to Paris* stated that on the left bank of Paris: 'the principal suburb (*faubourg*) is St-Germain, formerly the most aristocratic part of Paris: it retains to this day the dignified and spacious mansions of the ancient aristocracy.'[138] The *Maison de Verre* is sited in the heart of St-Germain. At its centre was its gynaecology clinic. Gynaecology, emerging as a separate medical discipline in 1890, was in the 1930s a largely conservative practice, reflecting the prevailing anti-Malthusian procreative politics.[139] The female body was promoted as the site of maternity alone.[140] Adolphe Pinard [1844–1934], 'the uncontested master of French gynaecology' pioneered puériculture

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[137] Céline, *Journey to the End of the Night* (1950), 257-261. A similar story appears in Colette, 'Gribiche' (2002).

[138] Roy Elston, *Cook's Traveller's Handbook to Paris* (London: Simpkin Marshall 1931), 25.

[139] George Weisz, 'The Development of Medical Specialization', in Ann La Berge and Mordechai Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Atlanta: Rodopi, 1994), 167–69.

[140] Stewart, *For Health and Beauty* (2001), 40, 23, 29. *Bulletin de l'Association Française des femmes médicins*, (1931), 15; also Maclaren, 'Abortion in France' (1978), 461–485; Virginie De Luca Barrusse, 'Pro-natalism and Hygienism in France', in *Population,* 64/3 (July–September 2009), 477–506.

and cleanliness for women's maternal rather than general health.[141] Even family physicians took a central role in family life, promoting maternity and paediatrics.[142]

Dr Jean Dalsace [1893–1970] was a successful yet progressive practitioner and writer.[143] In 1923 he became the leader of Dr Edmond Lévy-Solal's laboratory (a revered gynaecologist at the time), then worked with another well known consultant surgeon Christian Funck-Brentano.[144] In 1931 he co-founded the *Association d'Éducation et d'Études Sexologiques* (AEES), with activist feminist, Bertie Albrecht.[145] Promoting women's right to birth control as early as 1930, from 1932 he was a prominent member of the feminist *Ligue* (*Ligue Française pour Droit des Femmes*, founded in 1881) which was associated with progressive movements for sexual reform. In 1936, Dalsace met the founder of the American birth control movement, Abraham Stone, and learnt contraceptive techniques. On his return to France, he opened the first centre for contraceptive advice (in Suresnes, a suburb of Paris) with the complicity of Henri Sellier, then minister. He was one of the first gynaecologists to actively promote contraception, to safe-

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[141] Brauer, 'Rationalizing Eros' (2007), 126–148; 141.

[142] Martha L. Hildreth, 'Doctors and Families in France, 1880–1930: The Cultural Reconstruction of Medicine', in Ann La Berge and Mordechai Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Atlanta: Rodopi, 1994), 198. See Dr Jean Noir, preface to, Germain Blechmann, *Les feuillets du pédiatre* (Paris: Octave Doin, 1926).

[143] Jean Dalsace, *Gynecologic Radiography (Including Radiography of the Breast)* (Hoeber-Harper, 1959); *La Contraception: problemes biologiques et psychologiques* (Paris: Presses Universitaires de France, 1966); *La Sterilite* (Paris: Presses Universitaires de France, 1972). His research and publications focussed on the functioning of the ovarian cycle and sterility of tubal origin. He is said to have authored over a hundred papers.

[144] See also Caroline Gutmann, *The Legacy of Dr. Lamaze: the Man Who Changed Childbirth* (London: St Martins Press, 2001); Hans Lenfeldt, 'Review' of *L'Avortement*, in *The Journal of Sex Research*, 6/4 (November, 1970), 332.

[145] See also M. Bonierbale, '70 ans sexologie française', in *Sexologies*, 16 (2007), 244.

guard women from sterility following botched abortions. His commitment cost him his post as head of laboratory.[146] When the Dalsaces left Paris at the advent of the Second World War they settled in the département de l'Allier in central France. Dalsace helped organise the resistance and an underground hospital in the forêt de Tronçay in 1944.[147]

It seems Dr Dalsace was not only an enlightened gynaecologist before the war but a 'lay Freudian analyst' and follower of Polish-French psychoanalyst Rudolph Loewenstein [1898–1974],[148] a teaching analyst in Paris from 1925. Jacques Lacan, whose work prompts my methods, explored in the next chapter, was a young psychoanalyst in 1930s Paris, trained by Loewenstein between 1933–39. Given Dalsace's engagement with psychoanalysis, it is possible that he and Lacan were acquaintances. By the early 1920s Freudian psychoanalysis in Paris had become part of intellectual culture. Loewenstein had translated Freud's case study 'Dora' into French in 1928.[149] In October 1921 André Breton went to Vienna

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[146] Stewart, *For Health and Beauty* (2001), 123. Gutmann, *The Testament of Dr. Lamaze* (2001). Stewart states: 'In 1933, Dr Jean Dalsace publicized contraceptive methods and, as a result, lost his laboratory position. With the complicity of the socialist mayor of a commune known for its exemplary health measures, Dalsace set up a center to teach contraception and there distributed diaphragms and spermicidal jellies from England.' I found reiteration for this statement in the following: 'Le Dr Jean Dalsace ouvre le premier dispensaire de birth control à Suresnes', 1939: see www.ancic.assoc.fr/textes; and *Population and Societies*, 439, 7 (Suresnes is a commune just outside Paris). See also M. Bonierbale, '70 ans sexologie française', in *Sexologies*, 16 (2007), 238–258.

[147] Gutmann, *The Testament of Dr. Lamaze* (2001).

[148] M. Bonierbale, '70 ans sexologie française'(2007), 245. See also Gopnik 'The Ghost of the Glass' (1994), 60. It was rare, but not unknown for gynaecologists to utilise psychoanalysis in their practice for therapeutic and diagnostic purposes.

[149] Élisabeth Roudinesco, *Jacques Lacan,* (trans.) Barbara Bray (Columbia University Press, 1999), 19.

to meet Freud, calling him the 'greatest psychologist of our time.'[150] Lacan published his thesis in 1932, a copy of which he sent to Freud.[151]

After the war, Dalsace continued to promote and produce research and publications in his field. Chief Consultant of sterility at the gynaecological clinic of the Hospital Broca in 1951, Honorary President of the French Gynaecology Society, President of the French Family Planning Association and Director of the Sterility Clinic of Paris from 1950–63, he co-edited the *Journal of Sex Research* with Raoul Palmer. Following co-founding the French National Association for the Study of Abortion, with Anne-Marie Dourlen-Rollier, in 1969, they published the pamphlet *L'Avortement* (*Abortion*), 1970, arguing for the liberalisation of abortion laws and legalisation of a wider definition of therapeutic abortion.[152] The authors held back from full recommendation of 'abortion on demand' on the grounds that the French cultural climate seemed unready for this, (a politic position given their apparent support for it). After Dalsace's successful involvement in the Neuwirth Bill of 1967, which allowed contraception to be used and sold for the first time since 1920, they argued instead for more contraceptive support and public education – 81% of women had remained unaware of the change in the law and in 1968

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[150] See Alain de Mijolla, 'La psychanalyse en France, 1893–1965', in Roland Jaccard (ed.), *Histoire de la psychanalyse* (Paris: Hachette, 1982), 9–105. The play *Le mangeur de rêves* by Henri-René Lenormand (1882–1951), strongly influenced by Freud was successfully produced in 1922. The journal *Le disque vert* published a special issue in 1924 titled 'Freud et la psychanalyse' and the *Société psychanalytique de Paris* was formed in 1926.

[151] Further, in 1931 Lacan had become interested in Surrealism and met Salvador Dalí, and later André Breton and Georges Bataille. In 1936 he presented his paper on the mirror stage, and set up in private practice as a psychoanalyst. For general biographical details see Catherine Clément, *The Lives and Legends of Jacques Lacan* (New York: Columbia University Press, 1983); Dylan Evans, *An Introductory Dictionary to Lacanian Psychoanalysis* (New York: Brunner-Routledge, 1996), xix–xx.

[152] Jean Dalsace and Anne-Marie Dourlen-Rollier, *L'Avortement* (Paris: Casterman, 1970).

only 11% were using chemical/mechanical means of contraception, with 50% still using douches or rhythm method.[153] Abortion was eventually legalised on demand in January 1975 with Simone Veil's bill, five years after Dalsace's death.

Dalsace was a member of the French Communist Party, yet resisted joining the Russian communist party.[154] As discussed earlier, he welcomed avant-garde intellectuals and artists into his home. Despite this and his active professional life, references to the *Maison de Verre* in socio-historical material are minimal. It has been impossible to establish fully the role the *Maison de Verre* played in women's lives. The history recounted here maps out the socio-sexual contexts of Paris in which the building is sited. The building itself housed specific clinical uses. I speculate, through the sources used in this chapter, that countless woman in the 1930s were in the position of needing to control conception and may have had recourse to visit the *Maison de Verre*. By necessity records were not kept, and the building is now empty of the objects of its practice, a site of absence. This thesis is, in part, a search for those objects.

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[153] Dalsace and Dourlen-Rollier, *L'Avortement* (1970); and Lenfeldt, 'Review' of *L'Avortement* (1970), 333.

[154] In 1950 Dalsace helped found a movement against fascism set in the house, and signed the famous *le Manifesto des 121*, a petition against war in Algeria in 1960.

PART II

3 Part-object, Part-architecture

Figure 3.1: (**top**) Marcel Duchamp, *Rotorelief Disques*, 1935; (**bottom**) Pierre Chareau, *Maison de Verre*, 1928–32. 'Nevada' glass lens to front facade. Photograph Emma Cheatle, 2012.

On the whole, historians' assessments of the *Maison de Verre* focus on its form and functionalist image, overlooking its cultural and urban contexts, social occupations and historical meanings. Representations, written and visual, depict a finite modernist form with an interior empty of inhabitation.

At the opening of the twentieth century, Sigmund Freud wrote that the role of psychoanalytic research is 'merely to uncover connections by tracing what is manifest back to what is hidden.'[1] Using this core premise, I aim to recover the things beneath the image of the architecture of the *Maison de Verre*. I enter it as a historical spatial construct, and look at its parts as if clues to a fragmented story of the inhabitations and desires of past bodies.

As explored in 'Background', the *Large Glass* acts as a relational device. A response to the sexual and artistic constraints of 1910s and 20s Paris, it makes a pertinent history to the *Maison de Verre's* gynaecological clinic built five years later. Its glass, like that of the building, serves as a medium which registers otherwise concealed corporeal experiences.[2]

L Schema

In *The Optical Unconscious* Rosalind Krauss uses an interdisciplinary mode of rethinking art history. Reading this text at the beginning of my research, Krauss'

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[1] Sigmund Freud, 'Contributions to the Psychology of Erotic Love' [1910–18], in *The Psychology of Love* (Harmondsworth: Penguin, 2006), 257.

[2] Jean-François Lyotard, *Les Transformateurs Duchamp Duchamp's TRANS/formers* [1977], (trans.) Ian McLeod (Leuven: Leuven University Press, 2010), 179; Rosalind E. Krauss, *The Optical Unconscious* (Cambridge: MIT Press, 1994), 81, 122. Also see Rosalind E. Krauss, 'The Story of the Eye', in *New Literary History,* 21/2 (1990), 292.

theoretical approaches, writing methods, and in particular her use of Jacques Lacan's diagram, the 'L Schema', influenced the development of my thesis method.[3] The L Schema – a psychoanalytic construction of the relations between the subject and his objects – and associated concept of the 'part-object', are adopted by Krauss as theory to explore the way certain art objects stimulate a corporeal response from a spectator. [figure 3.2–3.4].[4]

Lacan used numerous schemata to give topological and mathematical accounts of his psychoanalytic theories. The diagrams have a relationship to his practice as architectural drawings have to buildings. They represent the analyses, but also operate in their own right, in the way that architectural drawings are potential representations of buildings yet can stand alone as objects of architectural discourse. A schema, Lacan points out, should be read as an analytic yet incomplete picture.[5]

First drawn in the 1950s, the L Schema describes the way a subject, the person in question, is not a single unified concept, but 'symbolised' or composed over time as a number of interrelated parts [figure 3.2]. These parts are given the following notations: (Es)*S* is the subject; *a'*, usually termed by Lacan as *objet petit a*, is the 'little other' or part-object; *A* is the 'big Other', or society; and *a* is *moi* or

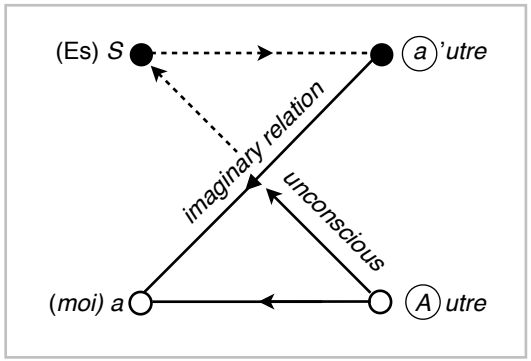

Figure 3.2: Lacan's first *L Schema* a. The subject [*Es*] is proposed as an effect of the discourse of the unconscious between the big other [*A*] and the little other [*a'*] and the ego [*a*].

[3] Krauss, *The Optical Unconscious* (1994), 22–3. Schema comes from the Greek for shape or plan. Earlier, Krauss adopted linguist Algirdas J. Greimas' Semiotic Square (derived from Aristotle) and structuralist Klein four-group mathematical diagrams to counter prevailing modernist art theory of the late 1970s, in particular the prescriptive position of Clement Greenberg. She argued for an 'expanded field' to shift the definition of contemporary sculpture. Krauss does not reference Lacan's schemata in this essay. See Rosalind E. Krauss, 'Sculpture in the Expanded Field', in Hal Foster (ed.), *The Anti-Aesthetic: Essays in Postmodern Culture* (Seattle; Washington: Bay Press, 1983), 31–42.

[4] Krauss, *The Optical Unconscious* (1994), 22–27, 36, 74–75.

[5] Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), 214.

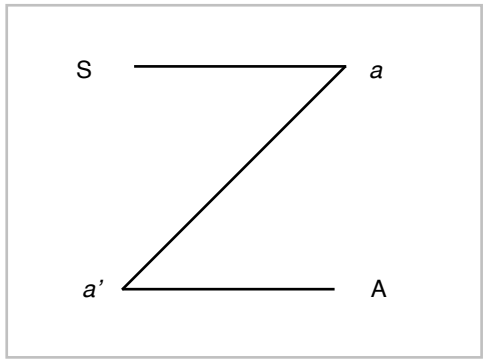

Figure 3.3: Lacan's later simplified version from 'On a Question Prior to Any Treatment of Psychosis', in *Écrits* (2002), 458.

the ego. The subject, (Es)*S*, comes into knowledge of himself during what Lacan terms the mirror stage.[6] On recognising himself in the mirror line, or imaginary relation, he splits into his part-objects, *a'*, and his ego, *a* (the notations for which are sometimes interchangeable [figure 3.3]).[7] He measures himself against the imperatives of society, *A*, forming unconscious repressions, which affect his ego, and operate through a temporal feedback mechanism on the other parts. The schema is not static, but describes a dynamic movement from one object to the other, a continuous rotation along the direction of the arrows. Lacan explains that it is through the subject's 'imaginary relationship with his semblable', his image in the mirror, that he is 'making himself into an object in order to deceive the Other', or those outside himself. [8]

The L Schema illustrates contingent objects in a dynamic discourse with each other, an integration of senses, parts of the body and memory. The subject is pictured fragmented and re-conjoined over time through a spatial game of hide and seek with his objects.

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[6] See Jacques Lacan, 'The Mirror Stage as Formative of the Function of I as Revealed in the Psychoanalytic Experience', in Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), 1–8. This essay was based on an earlier paper 'Le stade du miroir' [1936]. See Ellie Ragland Sullivan, *Jacques Lacan and the Philosophy of Psychoanalysis* (Beckenham: Croom Helm, 1986), n. 33, 315. I discuss the mirror stage further in 'Glass'.

[7] Here Lacan explains [although confusingly he switches the symbols *a'* and *a*]: 'This schema signifies that the condition of the subject, S […] depends on what unfolds in the Other, A. What unfolds there is articulated like a discourse (the unconscious is the Other's discourse [*discours de l'Autre*]).' He continues to say that S is party to his own discourse, his form 'reflected in his objects [*a'* and *a*]'.

[8] Jacques Lacan, 'Seminar on "The Purloined Letter"' [1956], in Jacques Lacan, *Écrits* (trans.) Bruce Fink (New York: W.W. Norton, 2002), 40.

Part-object

Lacan's L Schema, then, splits the subject into objects of different kinds. One of his key terms, *objet petit a*, describes any object of desire – a body, part or sound even – split from the subject. It appears to be a rephrasing of earlier psychoanalytic concepts of part-object, recalling the theory of Freud and Melanie Klein. Although Lacan dismissed Klein as a thinker, it seems impossible to me that he ignored her early definition of part-object from the 1930s. Initially associated with the mother's breast, Klein's part-object has two developmental phases. Firstly, the *a priori* image of the breast is 'introjected' by the infant as the object of desire representing mother, and 'split' into 'good' and 'bad' versions.[9] Later, the breast becomes understood as an exteriorised reality, a part-object. It is no longer attached to the mother but manifest as an idea – separable from the body, and hence displaced and replaced by other real objects, 'people and things'.[10] This separation, driven by guilt, sets up a creative relationship to the world. Klein's description of the process where 'creative impulses which have hither been dormant awaken and express themselves in such activities as drawing, modelling, building and speech', seems redolent of the active nature of Lacan's later *objet petit a* descriptions.[11]

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[9] Melanie Klein, 'Love, Guilt and Reparation', in Melanie Klein and Joan Rivière, *Love, Hate and Reparation* [1937] (London: Hogarth, 1953), 61, 91. See also Melanie Klein, 'A Contribution to the Psychosis of Manic Depressive States' [1935], in Juliet Mitchell (ed.), *The Selected Melanie Klein* (London: Penguin, 1986), 116, 118–119..

[10] Klein, 'Love, Guilt and Reparation' (1953), 91, 107. Also see Jay R. Greenberg, Stephen A. Mitchell, *Object Relations in Psychoanalytic Theory* (London: Harvard University Press, 1983), 119–150.

[11] Klein, 'Love, Guilt and Reparation' (1953), 107. Lacan, *Écrits* (2002), 693. Also, Lacan, *Écrits* (1991), 360.

Earlier, Freud wrote that the subject's 'pleasure drive' leaves a 'lost object' or '"little thing"'.[12] Freud's object is somewhat ambiguous as it oscillates between an instinctual drive and a real physical figure. The exterior first object, the breast as experienced through the pleasure drive, becomes interiorised as the infant matures. As this interior 'auto-erotic' mechanism, it is no longer a signification of the breast but an already existing internal drive. This has a circularity which Freud explains as: 'The finding of an object is in fact a refinding it.'[13]

Lacan's object is developed across a number of papers and seminars.[14] Following Freud and Klein, it is a concept between interior feeling and exterior figuration. It associates with parts of the body, interior feelings and memories, and physical objects that are identified outside the body from those associations. Settling on a definition that includes any object which sets desire, the 'drives', in motion for the subject, this object seems to be at times speech, waste products, body

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[12] See Sigmund Freud 'Melancholia' [1917], in *On Murder, Mourning and Melancholia* (London: Penguin, 2005), 207. See also Clément, *The Lives and Legends of Jacques Lacan* (1983), 98; Sigmund Freud, 'Three Essays on the Theory of Sexuality' [1905], 'Fetishism' [1927] and 'Female Sexuality' [1931], in Sigmund Freud, *On Sexuality: Three Essays on the Theory of Sexuality and other works,* (trans.) James Strachey (London: Penguin Books, 1977).

[13] Freud, 'Three Essays on the Theory of Sexuality' (1977), 222.

[14] For example, 'Function and Field of Speech and Language'; 'The Treatment of Psychosis'; and 'Subversion of Subject and Dialectic of Desire' in Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), particularly 59–63, 349; 'From Interpretation to the Transference'; and 'In You More Than You', in Jacques Lacan, *The Four Fundamental Concepts in Psychoanalysis,* (trans.) Alan Sheridan (London: Penguin, 1991), 256–259; 267–270.

parts, or the act of seeing.[15] Most importantly, I interpret it as a figure representing the *process* of the L Schema.

In the *Optical Unconscious*, Krauss uses the *objet petit a* and part-object as interchangeable terms.[16] With no overt definition, the concept seems to slip between Freud's lost object, Lacan's *petit a* and Klein's exteriorised part-object. Krauss, though, follows Lacan in that the part-object always signifies relations within the L Schema. It is established as the signifier in the process of the spectator's unfolding experience across the schema. This suggests to me that the part-object, whether body part or object that associates with the body, is also already a memory in the mind of the spectator which re-emerges, (Krauss uses the term 'pulses'), through his or her experiential interaction with the art object. Krauss' schemata are diagrams of that experience [figure 3.4].

Krauss identifies certain works of art as allusions to the process of the part-object. Referring to Duchamp's spinning glass discs (*Rotoreliefs*, 1935), [figure 3.1], and the pieces of collaged body floating in the spaces of Max Ernst's *La femme 100 têtes*, 1929 [figure 3.5],[17] she says, 'Sometimes the apparition is accompanied, or even substituted for, by a wheel-like form suggesting a turning disc, a circle that […] resembles Duchamp's optical machines, or his rotoreliefs,

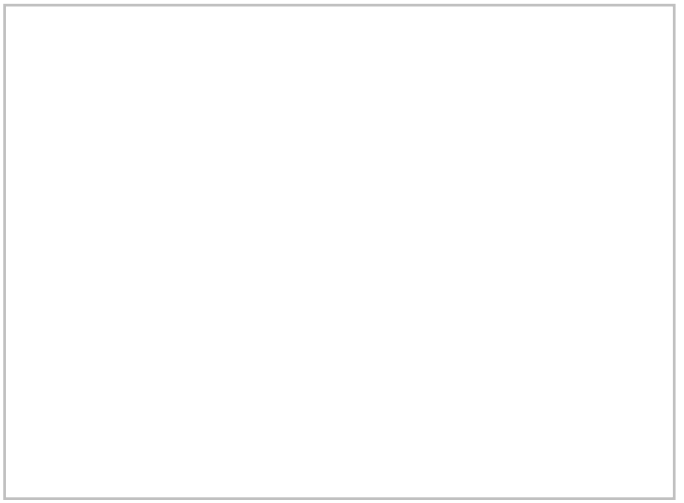


Figure 3.4: Krauss' remapping of Lacan's *L Schema*. Rosalind E. Krauss, *The Optical Unconscious* (1994), 22–27, 36, 74–75, 76–77.

[15] Jacques Lacan, *The Four Fundamental Concepts in Psychoanalysis,* (trans.) Alan Sheridan (London: Penguin, 1991), 168. Lacan translates the drive or instinct from Freud's *Treib*, *dérive* [drift] in French, suggesting a more circuitous route than Freud's instinctual urge. I return to Lacan's definition of the object at the end of this chapter.

[16] Krauss also refers to the part-object in Krauss, 'The Story of the Eye' (1990), 293; Yves Alain-Bois and Rosalind E. Krauss, *Formless: A User's Guide* (London: MIT Press, 1999); Rosalind E. Krauss, *Bachelors* (London: October Books, 1999), 60. Also see Helen Molesworth (ed.), *Part Object Part Sculpture* (University Park: Penn State University Press, 2005).

[17] Krauss, *The Optical Unconscious* (1994), 81.

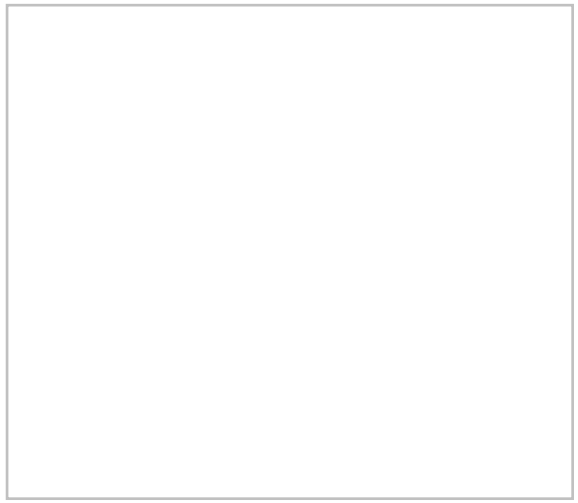


Figure 3.5: Max Ernst, *La femme 100 têtes* (*'L'immaculée conception manquée*), 1929.

with their obvious allusion to the part-object: the breast, the eye, the belly, the womb.'[18]

Spatial Experience

These works split the body into parts across a space to create a network of body interactions. For instance, it is not merely the way in which the *Rotoreliefs* transform into breast, eye or belly but the way in which, as I stand watching them in the room, I perceive my breast, eye or belly to be separated from my body and reincorporated into the space of the spinning disc. By watching, part of me becomes spinning glass. A spatial interaction between subject and object occurs: I am split between myself and the space I occupy here, and the *Rotorelief* over there. There is a discomfort to this scattering – as Krauss says, 'those part-objects belonging to the subject are similarly parts lost to the subject.'[19] Recognising the part-object is therefore a spatial and temporal process of losing parts/pasts. For Lacan the part-object is never reabsorbed into the subject, but remains external, adrift. It, he says, 'can never be swallowed as it were [but] remains stuck in the gullet of the signifier. It is at this point of lack that the subject has to recognize himself.'[20]

For me, the spatialisation of the body, split between here and there, is the very essence of the L Schema. It is a two-dimensional diagram – a 'mental framework' – that represents the three-dimensional physical reality of experiences

[18] Krauss, *The Optical Unconscious* (1994), 79. See also Krauss, *Formless: A User's Guide* (London: MIT Press, 1999), 152–61.

[19] Krauss, *The Optical Unconscious* (1994), 75.

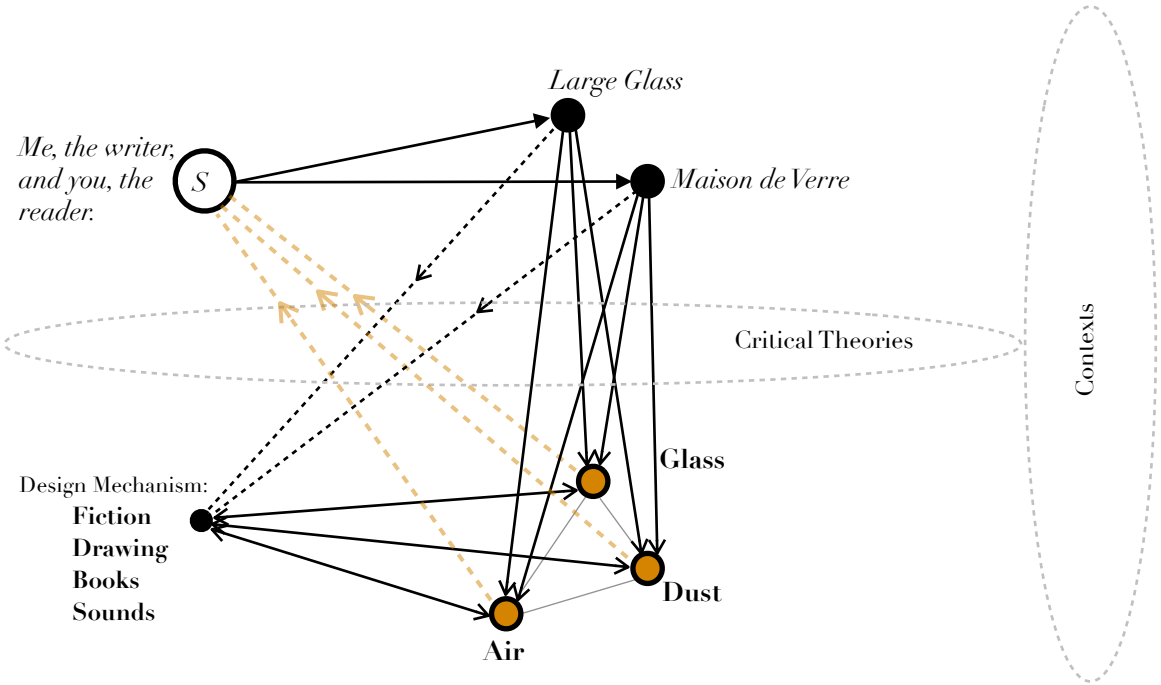
[20] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 270.

occurring over time.[21] The subject is set out through a number of exteriorised parts which the schema houses. The subject is therefore not a spectator outside the schema looking in, but an occupant inside it. He is even in the way of his objects, masking them.[22] He is not only defined by the schema in an abstract way but inhabits it. It is his home, built over time. Likewise, his actual home is the parallel real space across which he positions and loses objects, leaves marks, sees himself. He is looking, walking around in, taking a bath, leaving traces, sleeping amongst his objects.

[21] The definition of a schema as a mental framework comes from Jean Piaget, *The Origin of Intelligence in the Child* [1936], (trans.) M. Cook (London: Routledge, 1953).

[22] Krauss points out something similar, *The Optical Unconscious* (1994), 88.

Plate 3: Part-architecture schema, 2012.



Part-architecture

The L Schema, then, is a three-dimensional structure, spatialising the subject's object history. It suggests that, as objects coalesce in the mind of the subject over time, an architecture is being formed as a space-time narrative. The L Schema is the psychoanalytic form of the subject's 'house' – its objects remembered in rooms, against walls, floors, windows, in relationship to each other.

On its flat surface the *Large Glass* depicts particular bodies engaging in activities in space over time. As such it is the Bride and Bachelor's house, the place in which they play out their relationship. Yet what we are seeing is a frame, a slice through the proceedings, with the rest absent. The actual house of the *Maison de Verre* can be described, in reverse, as a housing of its now absent inhabitants and visitors. It is a building of numerous parts and materials – glass lens, glass panel, steel column, sliding screen, sanitary ware and other bespoke items – in spatial arrangements, on which each inhabitant is located as a mark or trace made by touch, association, event, love and memory. Reminded of Gaston Bachelard's description of memory encapsulated within a house as 'compressed time', the *Maison de Verre*, then, has event and memory pressed into it.[23] When studied, its objects and spaces serve as clues to recovering former inhabitations, events and interactions.

Where the L Schema is a general diagram describing the specificities of experience, the *Maison de Verre* is a specific place which has housed many lives. Conversely, the *Large Glass* is a frame in time. My motivation is to write a new

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[23] Gaston Bachelard, *The Poetics of Space* [1958], (trans.) Maria Jolas (Boston: Beacon, 1994), 8.

architectural form which likewise frames the house at a particular moment in history. For this sense of framing and writing a set of past architectural relations, I coin the term 'part-architecture'.

The part-architecture is a kind of diagram or abstraction describing the process of doing this. It is, like an architectural plan, a mental framework. If the plan generally operates as a fixed representation of a future construction, the part-architecture describes the opposite process of engaging the past, or 'what was there'. Interestingly, the plans we have of the *Maison de Verre* were drawn decades afterwards, already an analysis of what was there.[24] The part-architecture suggests an alternative plan, a schema which describes the looking backwards and the method of building a story from the existing house. It maps the retrospective analysis, recollection and reconstruction of an architecture [Plate 3].[25]

Like the L Schema, the part-architecture schema is based on a square, with 'objects' in the four corners. As researcher and writer, it is my occupation of the *Maison de Verre* and the *Large Glass* – and their occupation of me – which has inspired this thesis, therefore 'S' (the subject at the top left) is, at the outset, me. The two objects I research are sited top right. My analysis of these is instigated through three mechanisms: their own material presence and history (indicated by solid vertical lines pointing down from them); my 'design' work, a set of creative productions located bottom left (reached by dashed diagonal lines); and a plane of 'critical theories', derived from specific cultural thinkers who influence

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[24] As discussed, no original plans corresponding to the final building are in existence. The plans I refer to can be seen in 'Background' figures 2.3 and 2.6, drawn later by Bernard Bauchet. Duchamp drew plans of a sort to help him construct the *Large Glass* see 'Glass' [figure 4.30].

[25] Thanks to Penelope Haralambidou for instigating this diagram.

my approach (a plane through the middle). From the process of these parts enacting on each other, I have written three related 'chapters' – 'Glass', 'Dust', 'Air' (clustered to the bottom right), which in turn have effected the production of more designs.

In the *Large Glass* and the *Maison de Verre,* glass, dust and air are both intrinsic and connected materials. Glass predominates, forming a medium for dust collected intentionally on the *Large Glass* or as a byproduct in the *Maison de Verre*; air, contained within the glass walls, both activates their interior life, whether metaphorically (the *Large Glass*) or literally (the *Maison de Verre*), and oxidises their materials causing further dust. In addition, each material prompts a different understanding of the terms of their history and occupation: glass signifies visual interaction; dust suggests bodies, unwanted matter, decay, cleaning and archiving; and air the breath of life and the carrying of sound.

The chapters are investigative and subjective studies of the *Large Glass* and *Maison de Verre*. As outlined in my 'Introduction', each starts with a review of the material in question, its history and role in constructing the architecture and artwork, then sets up more metaphorical meanings. Design projects, used as research, are presented as punctuations to the text. The results review the *Maison de Verre* in relationship to the *Large Glass* and recover it as an inhabited space of the 1930s. They aim to be partial, open-ended and contingent, and to change the status of S (as seen by yellow dashed lines working diagonally back from the chapters). S – initially me, the writer – ultimately both incorporates the past lives of others, and becomes you, the reader of the thesis in the present.

Writing Architecture

The part-architecture in the end, is a writing project, both analytic and creative. As suggested, the writing is a dialogue between design and theory, informed by a set

of critical theories from other thinkers. Before introducing these as 'Design Methods' and 'Critical Theories', I move sideways to review a set of wider 'Contexts' (to the right of the diagram): the work of Jennifer Bloomer, Katarina Bonnevier, Katja Grillner, Sharon Kivland, Mieke Bal and Hélène Cixous, and the research of my supervisors, Penelope Haralambidou and Jane Rendell.[26] As a group, their writing expands across the disciplines of architecture, art and philosophy. They have also influenced my work theoretically but I position them here as contexts because of the way their work tends to demonstrate theory through design writing, or text as project. In the next section, I describe and discuss their key works before framing my own practice of writing architecture in response.

Contexts

Penelope Haralambidou's doctoral thesis, *The Blossoming of Perspective: An Investigation of Spatial Representation*, critically reviews the spatial intent of Mar-

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[26] Penelope Haralambidou, *The Blossoming of Perspective: An Investigation of Spatial Representation* (unpublished doctoral thesis, University of London, 2003); Penelope Haralambidou, *The Blossoming of Perspective: A Study* (London: DomoBaal Editions, 2006); Jane Rendell, 'Thresholds, Passages and Surfaces: Touching, Passing and Seeing in the Burlington Arcade', in Alex Coles (ed.), *De-, Dis-, Ex-, 3: The Optic of Walter Benjamin,* (London: Black Dog, 1999), 168–191; Jane Rendell, 'From Architectural History to Spatial Writing', in Elvan Altan Ergut, Dana Arnold, Belgin Turan Ozkaya, (eds.), *Rethinking Architectural Historiography* (London: Routledge, 2006), 135–150; Jane Rendell, 'Architecture-Writing', in *Journal of Architecture,* 10/3 (June 2005), 255–64; Jennifer Bloomer, *Architecture and the Text: The (S)crypts of Joyce and Piranesi* (London: Yale University Press, 1993); Katarina Bonnevier, *Behind Straight Curtains: Towards a Queer Feminist Theory of Architecture* (Stockholm: Axl Books, 2007); Katja Grillner, *Ramble, Linger and Gaze: Dialogues from the Landscape Garden* (Stockholm: Akademisk Avhandling, 2000); Sharon Kivland, *A Case of Hysteria* (London: Book Works, 1999); Sharon Kivland, *Memoires* (Staffordshire University Press, 2000); Mieke Bal, *Louise Bourgeois' Spider: The Architecture of Art-Writing* (Chicago: University of Chicago Press, 2001); Hélène Cixous and Mireille Calle-Gruber, *Hélène Cixous: Rootprints: Memory and Life Writing*, (trans.) Eric Prenowitz (London: Routledge, 1997); Susan Sellers, *The Hélène Cixous Reader*, (New York: Routledge, 1994), 35–46.

cel Duchamp's *Étant donnés*, 1946–66. Haralambidou establishes *Étant donnés* as an allegory, that is, it 'says one thing and means another'.[27] As 'a mathematical problem or a riddle … a crime scene under forensic examination … a detective mystery', it demands examination or understanding.[28] The examination occurs not through text alone, but through a design practice of models, photographs, drawings, text and mixed media assemblages.

This is architectural design not as building (there are no drawings or models of recognisable buildings) but as spatial enquiry and theory. As Haralambidou says, 'this research strengthened my view of architectural design as a practice not strictly confined within the boundaries of building but maybe closer to visual literature or philosophy, a method for analysing spatial concepts and their relationship to behaviour, perception, observation and imagination.'[29] Haralambidou's work expands the notion of the architect's drawing practice: structure, construction and detail become spatial composition, material and text. Her thesis, it seems to me, is driven by the necessity to work out the problem, make the interpretation, through the mediums by which the question has been posed. Writing and drawing coalesce as tools for criticism.

Jennifer Bloomer's *Architecture and the Text: The (S)crypts of Joyce and Piranesi*, sets out to challenge the 'non-neutrality of language and history', and the potential subject matter of architectural history.[30] To do so she aligns a literary

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[27] Haralambidou draws this understanding of allegory from Angus Fletcher, *Allegory: The Theory of a Symbolic Mode* (Ithaca: Cornell, 1965), 2. Allegory 'signifies a doubleness of intention that requires interpretation', Haralambidou, *The Blossoming of Perspective* (2006), 5.

[28] Haralambidou, *The Blossoming of Perspective* (2006), 5–6.

[29] Haralambidou, *The Blossoming of Perspective* (2003), 239.

[30] Bloomer, *Architecture and the Text* (1993), 3.

work, James Joyce's *Finnegan's Wake*, 1939, with Giovanni Battista Piranesi's etchings, *Campo Marzio*, 1762, *Collegio*, 1750, and *Caceri*, 1745–61. Positing an intersection in their representative terms and structure she uses the tactics of *Finnegan's Wake* to analyse the 'architecture' of the images.[31] Her own text's 'strategies of writing/constructing/reading … are appropriated from strategies dissected out of the [original] text'.[32] She defines these as deconstruction, allegory, autobiography and play. Writing as a designer as much as a theoretician and historian she uses the text to reframe history as 'an approach to design.'[33]

For Bloomer, text, especially *Finnegan's Wake*, is woven from material – it is a three-dimensional construction rather than a linear enterprise.[34] It conceals its meaning in its spatiality. Following Jacques Derrida's work on deconstruction, 'whose mode is a kind of radical empiricism', the text itself is everything.[35] That is, everything can be found within the strategies and internal logic of it, even its own criticism.[36] She also writes that architecture is '"always already" allegorical in the Benjaminian sense. That is, architecture contains the instrument for radical critical

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[31] Bloomer, *Architecture and the Text* (1993), ix, 6.

[32] Bloomer, *Architecture and the Text* (1993), 4.

[33] Bloomer, *Architecture and the Text* (1993), x.

[34] Bloomer, *Architecture and the Text* (1993), 6.

[35] Bloomer, *Architecture and the Text* (1993), 7.

[36] For Bloomer, Joyce's strategies can also be thought of as 'deconstructive', pages 6-7. For an account of deconstruction she suggests Vincent Leitch, *Deconstructive Criticism: An Advanced Introduction* (New York: Columbia University Press, 1983), on Joyce see 202.

operations upon itself within itself.'[37] In this way it is also a kind of text. For Bloomer, writing is both critical strategy and results in an architecture (of an architecture) and a text (of a text), an allegorical demonstration: 'a multi-layered palimpsest, bits and pieces of previous and succeeding texts read through other texts.'[38]

Like Bloomer, Katarina Bonnevier's thesis, *Behind Straight Curtains: Towards a Queer Feminist Theory of Architecture*, attempts to 'contribute to an architectural shift: a shift in both the analysis of architecture and the enactment of architecture'.[39] She looks 'towards a built environment which does not simply repeat repressive structures but tries to resist discriminations and dismantle hierarchies.'[40] Her thesis rethinks the history of three 'scenes' – Eileen Gray's house *E.1027*, Roquebrune-Cap-Martin, Alpes-Maritimes, 1926–29; Natalie Barney's literary salon, 20 rue Jacob, Paris, 1909–68; and Selma Lagerlof's house, *Mårbacka*, midwest Sweden, 1919–23 – through three performances or lectures, held in different Stockholm locations. The resulting 'lecture-texts' forming the main part of the thesis combine 'actors, acts and architecture'.[41] Written as if performed

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[37] Bloomer is citing Walter Benjamin, *The Origin of German Tragic Drama* [1963], (trans.) John Osborne (London: Verso, 1998), 167, 188; Bloomer, *Architecture and the Text* (1993), 20-21 and 36–37; 23.

[38] Bloomer, *Architecture and the Text* (1993), 12.

[39] Bonnevier, *Behind Straight Curtains* (2007), 15.

[40] Bonnevier, *Behind Straight Curtains* (2007), 15.

[41] Bonnevier, *Behind Straight Curtains* (2007), 16.

theory rather than as a straightforward lecture scripts, they suggest a performativity of architecture as a new form of historical discourse.[42]

Bonnevier's thesis takes a 'lesbian, or a female non-straight subject position'.[43] All of the 'scenes' were occupied by women who had same sex relationships.[44] Having said that, it is Bonnevier who occupies the spaces in question. Her different 'voices', framing factual, theoretical, presentational and fictional material, infiltrate not only the lectures but the buildings. She is spectator, lecturer, performer and interlocutor in the present dismantling the accepted historically gendered perceptions of architectural form.[45] The performed nature of the analysis suggests a temporal shift which moves the reader between the present and the past.

Jane Rendell's work, more theoretical, might arguably be placed in the 'Critical Theories' section. I have kept it here as it also demonstrates writing as practice. Rendell introduced me to a particular form of writing practice which springs from concepts of 'art writing', originally defined by David Carrier and

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[42] Bonnevier, *Behind Straight Curtains* (2007), 21, 114. Bonnevier is referring to Judith Butler, *Excitable Speech. A Politics of the Performative* (London: Routledge, 1997). Some of the lecture has taken place as a presentation, which is combined in the text with further theory and other characters' imagined words, see pages 380–1.

[43] Bonnevier, *Behind Straight Curtains* (2007), 15.

[44] Bonnevier, *Behind Straight Curtains* (2007), 20.

[45] Bonnevier, *Behind Straight Curtains* (2007), 18. Bonnevier refers to Adrian Forty, *Words and Buildings, A Vocabulary of Modern Architecture* (London: Thames and Hudson, 2000), 54–61, and Beatriz Colomina's study of Adolf Loos, Beatriz Colomina, 'The Split Wall: Domestic Voyeurism' in Beatriz Colomina (ed), *Sexuality and Space* (Princeton: Princeton Architectural Press, 1992), 73–80.

Mieke Bal.[46] Art writing explores the writer's subjectivity in relation to the work of criticism. His/her position as a writer is broadly defined by Rendell as 'self-reflective and creative as well as politically aware.'[47] She develops her own work – a feminist art and architectural criticism and history – through several hyphenated terms, 'architecture-writing' and 'spatial-writing', to describe the spatiality of the writer's positioning. Her most recent, 'site-writing', examines writing itself as a site, a space occupied by the writer.[48] Interdisciplinary, she brings disciplines and subject positions to bear on each other as reflective mechanisms: 'I seek to make manifest the position of the writing subject and her choice of objects of study and subject matters, processes of intellectual enquiry and creative production'.[49]

Borrowing from literary, poetic and philosophical modes, Rendell calls for types of criticism that consider the various identities of the writer, and that pay attention to distance and intimacy, as well as relation and encounter with the object of criticism.[50] To this end, works like 'Doing it, (Un)Doing it, (Over)Doing it Yourself: Rhetorics of Architectural Abuse' and 'Site-Writing: She is Walking About

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[46] See David Carrier, *Artwriting* (Amherst: University of Massachusetts Press, 1987); Mieke Bal, *Looking In: The Art of Viewing*, (Amsterdam: G+B Arts, 2001); Rendell, 'Architecture-Writing' (2005), 255–6; Jane Rendell, *Site-Writing: The Architecture of Art Criticism* (I.B. Tauris, 2011).

[47] Rendell, 'Architecture-Writing' (2005), 256.

[48] Rendell, 'Architecture-Writing' (2005), 256. Jane Rendell, *Site-Writing: The Architecture of Art Criticism* (I.B. Tauris, 2011).

[49] Rendell, 'Architecture-Writing' (2005), 256.

[50] See Rendell, 'Architecture-Writing' (2005), 257. Rendell cites Italo Calvino, *Literature Machine* (London: Vintage, 1997), 15; Roland Barthes, *The Grain of the Voice: Interviews 1962–80*, (trans.) Linda Coverdale (Los Angeles: University of California Press, 1991); Gloria Anzaldua, *Borderlands/La Frontera: The New Mestiza* (San Francisco: Lute Books, 1999); and Hélène Cixous, *Sorties*, (trans.) Betsy Wing, in Sellers (ed.), *The Hélène Cixous Reader* (1994).

in a Town Which She Does Not Know' explore different forms of writing, including autobiographical and fictional modes.[51] Questioning the objective, authorial voice usually employed by historians, she frames personal memory not merely as another descriptive mode but as a critical interpretation.[52] The autobiographical 'memoir' is also posed as spatial – following the '"shape a life takes"'.[53] Further, for me, there is an intrinsic fictional element to autobiography which means a memoir does not just 'follow' but actively shapes or designs.

Katja Grillner's thesis, *Ramble, linger and gaze – dialogues from the landscape garden*, interprets an eighteenth century landscape garden (Hagley Park) through a fictional account of a dialogue taking place there between Grillner and two eighteenth century garden writers, Thomas Whately and Joseph Heely. Grillner writes that the ensuing story, 'constructs an imaginary space of a landscape garden. It conjures up a site of discourse, and makes that discourse present in the here and now of my own, and of the reader's imagination.'[54] Through dialogue which takes place in a single day spent at the garden, she presents the eighteenth century writers' ideas to construct the garden as an interiorised space in our minds, and through her stated presence, infiltrates and intervenes in their thinking.

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[51] For example, Jane Rendell, 'Doing it, (Un)Doing it, (Over)Doing it Yourself: Rhetorics of Architectural Abuse', in Jonathan Hill (ed.), *Occupying Architecture: Between the Architect and the User* (London: Routledge, 1998), 229–246 ; Jane Rendell, 'Site-Writing: She is Walking About in a Town Which She Does Not Know', in Lesley McFadden and Matthew Barrac (eds.), *Home Cultures,* 4/2 (July 2007), 177–199.

[52] Rendell, 'From Architectural History to Spatial Writing' (2006), 142.

[53] Rendell, 'From Architectural History to Spatial Writing' (2006), 142.

[54] Grillner, 'Writing and Landscape' (2003), 240.

Grillner asks: 'Might an "architectural design project" be pursued through writing exclusively? As well as drawings, images, films or models, the text serving to establish a fictional site, a 'project', in which scenes of, or points for, critical reflection may be tested out and specified?'[55] Using two modes of thinking: what she calls an 'object-mode' where the 'object-reality' of the garden appears purely visually as if a silent film, and the 'character-mode' of feeling and sensual experience, the text reenacts garden.[56] With no illustrations, the text is everything: a construction where '*discourse* meets *landscape*'.[57]

Mieke Bal's *Louise Bourgeois' Spider: The Architecture of Art-Writing*, considers *Spider*, 1997 as a 'difficult to "read" and far from "beautiful"' artwork.[58] For Bal it is, instead, a 'theoretical object' which requires an engaged viewer.[59] She makes what she calls an 'account of viewing the work' through a process of 'narratology', performing as memory, rather than a 'rapid glance'.[60] For Bal, memory is an internalised object – she writes that it has 'presence one senses but cannot grasp. For the memories here are not narrated; they are just put there, like the found objects that they, in fact, are.'[61] The found object, another form of part-object, is an object which connects to or remembers the past.

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[55] Grillner, 'Writing and Landscape' (2003), 246.

[56] Grillner, *Ramble, Linger and Gaze* (2000), 151–2.

[57] Grillner, *Ramble, Linger and Gaze* (2000), 257.

[58] Bal, *Louise Bourgeois' Spider* (2001), 3.

[59] Bal, *Louise Bourgeois' Spider* (2001), 5.

[60] Bal, *Louise Bourgeois' Spider* (2001), 25, 27. Bal is referring to Krauss' description of Duchamp's *Rotoreliefs* in *The Optical Unconscious*.

[61] Bal, *Louise Bourgeois' Spider* (2001), 27.

Bal argues that through narrative discourse, or narratology, Bourgeois draws the spectator inside the artwork, 'binds sculpture to architecture'.[62] Bal's account of *Spider* itself develops a new architectural form. Her narratology provides a key theoretical approach for my work, expanded on in the 'Critical Theories' section following.

Sharon Kivland writes that she is interested in places: 'archives, libraries, the arcades, and the intersection of public political action and private subjectivity.'[63] A member of the Centre for Freudian and Analysis Research, all her work is perhaps a kind of personal musing on the thinking of Sigmund Freud. Kivland, I tender, is inspired by his extraordinary ability to use narrative to create his case histories.

The resulting work, visual and/or textual accounts of place, event, or object, is often hard to categorise, lying as it does between art, writing, bookwork and psychoanalysis. *A Case of Hysteria* is a good example. A book by an artist yet not quite an artist's book it could be a theory yet reads more like a novel. It is not really a novel as it is full of digressions and meanderings, side alleys and dead ends. Both a rewriting and a critical re-translation of Freud's famous case history of Ida Bauer, 'Dora', who Freud failed to 'cure' in 1901, it gives Ida a new space.[64] Reusing the English translation Kivland quotes, repeats, and makes subtle insertions, and plays to shift Freud's control of the story back to her.[65] The re-

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[62] Bal, *Louise Bourgeois' Spider*, 31.

[63] http://www.sharonkivland.com/

[64] Sigmund Freud, 'Dora' [1905 [1901]], and 'Little Hans' [1909], in Sigmund Freud, *Case Histories,* (trans.) Alix and James Strachey (Harmondsworth: Penguin, 1977).

[65] Kivland, *A Case of Hysteria* (1999), for instance page 6, 23, 51.

sulting text explores the necessity of adopting fictions, of revelation and concealment and their affect on the spatiality of a person's history.

The final work I mention here is Hélène Cixous' *Rootprints: Memory and Life Writing*. All of Cixous' writing arguably springs from her biographical positioning, her gender, childhood experiences and feelings of marginality. Born and brought up in Algeria, speaking or hearing German, Arabic, Hebrew, English and French, Cixous was an outsider to French literature when she moved to Paris in 1955. Her genealogy, and the complexity of her early life are the metaphoric, political and psychic seeds for her taking up of writing: 'What I am recounting here (including what is forgotten and omitted) is what for me is dissociable from writing.'[66] Writing became a form of bringing herself into being. Straddling the walls of genres, *Rootprints* combines memoir and critical commentary, fiction and feminist philosophy. Several narratives run through with maps, photographs and text boxes: 'All biographies like all autobiographies like all narratives tell one story in place of another story.'[67]

Cixous' work is all in the writing. As Derrida points out the text 'crawls with thousands of meanings … A genius for making language speak … She knows how to make it say what it keeps in reserve.'[68]

In common, each of these projects is conscious of the gap between the act of writing and the object being studied. Uncovering the meaning in existing spaces and objects, they form a work of writing in that gap, which might be considered to be, in the end, a new object itself. The new object questions, subverts even, certain social and political constructions. My own writing project has simi-

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[66] Cixous and Calle-Gruber, *Rootprints* (1997), 178.

[67] Cixous and Calle-Gruber, *Rootprints* (1997), 178.

[68] Cixous and Calle-Gruber, *Rootprints* (1997), 203.

larities in particular with Haralambidou's design as critical practice, Rendell's writing as a spatial political form, Bloomer's reading of architecture as text and text as a three-dimensional construction, Bal's accounting of an object as theoretical narrative, Bonnevier's writing as performance, Grillner's writing *an* architecture, and Kivland's narrative book forms. Here I reflect further on how my work is original in this context.

Rendell notes that Grillner turns the term 'architecture-writing' into 'writing architecture'.[69] For me the hyphenated term can make 'writing' seem secondary to the 'architecture' from which it springs: the architecture, usually a building, remains the object rather than the writing. 'Writing architecture', on the other hand, suggests to me that the activity of writing forms the architecture, is a mode of construction rather than criticism alone. Grillner writes, 'Critical writing is in effect inherently architectural, or topographical, in this respect. Whether explicitly or not the text establishes, draws, a room, or a landscape, to house objects and critical reflections.'[70]

In this context, my work speculates on what constitutes an architecture. Is it building, design or writing – where should the boundaries between the various combinations of practical and functional, idiosyncratic and experimental, design, building and writing be drawn? I propose architecture, through its history and occupation, is always a relationship between design, building and writing. Writing part-architecture, then, refers to building, yet uses design and theory to write ar-

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[69] http://www.akad.se/progwri.htm; Katja Grillner, 'Writing and Landscape – Setting Scenes for Critical Reflection', in *The Journal of Architecture*, 8/2 (2003), 239–249. See Rendell, 'Architecture-Writing' (2005), 261.

[70] Grillner, 'Writing and Landscape' (2003), 239. A further text which has inspired me is Karen Bermann, 'The House Behind', in Steve Pile and Heidi Nast (eds.), *Places Through the Body* (London: Routledge, 1998), 165–180.

chitecture. Two historical works, the *Maison de Verre* and the *Large Glass*, are cross-examined by acts of analytic writing and design to make something new: a part-architecture.

Bloomer's method of intersecting Joyce and Piranesi is similar to my cross-referring the intent of the *Large Glass* with the architecture of the *Maison de Verre*. I first read *Architecture and the Text* when it was published in the 1990s. On rereading there is another similarity. Bloomer's use of a diagram to allegorically structure her textual constructions on Piranesi has overlaps with my interest in Lacan's L Schema and my subsequent part-architecture schema.[71]

Haralambidou also examines the relation between two works – *Étant donnés* and Leonardo da Vinci's *Mona Lisa*, 1503–06 – and Bonnevier three. In my thesis, the two works were not 'chosen' for their similarity, but seemed to be already aligned. Importantly, this is not a dialectical approach, like Eisensteinian montage, as the works are not, in my mind, oppositional or contrasting. My thesis is that each proposes and contextualises the other already. They are works within works, or doubles. Rather than merely providing evidence to reinforce the other, their joint critique produces new constructions, heterogeneous yet related written spaces.

My thesis specifically revisits the past. I reconstruct the history to the *Maison de Verre* and the *Large Glass* in the present, to position them as social, artistic and sexual reflections of their time. Like Bloomer, it reformulates history as 'an approach to design'. Conversely, my text is framed as a piece of history which is stimulated by design elements internal to it. Propositional in reverse, it offers a

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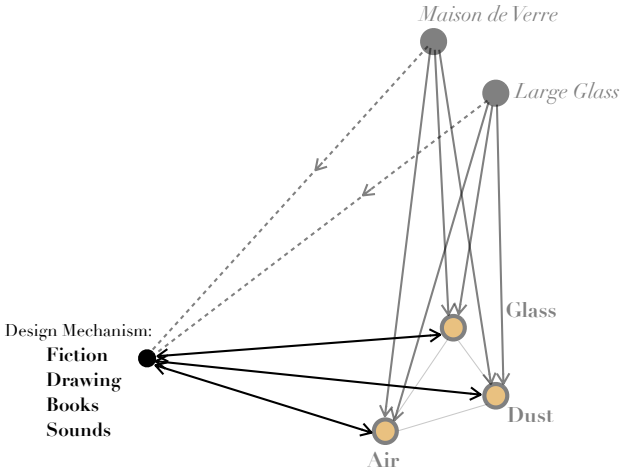
[71] Bloomer redraws the *vesica piscis* featured in *Finnegan's Wake*. Two overlapping circles, the centre of each touching the perimeter of the other, leave a lens shape at the centre for constructing an equilateral triangle. The diagram forms a motif for her overall enterprise in intersecting the two works. The intersection of two parts produces a third, which makes complex the potential binary of the two.

new critical story of the past by adopting visual and spatial methods in the present.

It is cross-disciplinary: between design and fiction, history and theory, art and architecture. Each part is brought to bear on the other, rotational like the L Schema, affecting, and reflecting each other. The parts spring from my position as instigator and as their initial subject. It is my entry into the work and movement around it that initiates it as a critique. I have moved through the works using theory, direct observation and imagination. Different 'voices' emerge from my positioning reminiscent of, for example, Bonnevier, Grillner and Rendell's work. My theoretical voice reframes the *Maison de Verre's* history, interspersed with observations of the raw material of the building. My contemporary experience of the building – through visits, surveys, drawings and photographs – is ultimately translated into fictional, imagined understandings of past inhabitations. Overall, my writing aims at a reflexive space for further occupancy: the chapters 'Glass', 'Dust' and 'Air' are kinds of architecture which reconstruct the *Maison de Verre* for you, the reader, to enter, walk around in. I hope you meet the ghosts of the building's past inhabitants, or at least the potential of them.

The remainder of this chapter explores the role of 'Design' and 'Critical Theories' in the three chapters 'Glass', 'Dust' and 'Air'.



Design Methods

During the writing of this thesis I have used various processes of design to imagine the use and life of the *Maison de Verre* and the *Large Glass*. These design operations are integral – without them I would not be able to make the arguments. Conversely, the writing stimulates design. An equal dialogue between the visual and textual ensues.

I use four main forms of design: fiction, drawing, books and sound. Examples can be seen in Plates 4–30 at the end of this chapter. Key projects are interspersed in the main chapters.

Fiction as Design

There are two manifestations of fiction in my thesis. Firstly, it is source material for the historical social landscape of Paris, as described in my chapter 'Background'. Secondly, I write fictional episodes which recover the inhabitations of the *Maison de Verre* in the 1930s. I call these fiction as design.

History, autobiography and fiction are components or versions of each other. They 'over-read' each other, a term that can mean both reading something that is not there and reading that brings questions and new interpretations and therefore has a value.[72] Carolyn Steedman, writing about history, suggests 'all stories, regardless of content, take part in the art of fiction.'[73] Written histories and autobiographies are influenced by fictional methods of pace, structure, sequence, narration, framing. Otherwise formless and continuous, events must be shaped, interpreted and given endings.

Conversely, architectural history tends to focus on the already fixed shape of a building, leaving its spatial and temporal stories unwritten. Positioned at key points into my chapters, my own fiction writing draws out the potential historical event from the physical form of the building. The fictional projects have arguably been affected by my own significant experiences of gynaecology and maternity, which possibly even instigated the thesis as a whole. Rather than using these experiences, though, I am interested in the way my spatial and material observation and knowledge of the building combines with historical research and imagination to retrospectively define others' lives there. In this, I argue, the fictions are a form which design the past.

In particular, I use repetitious techniques, from different viewpoints over time.[74] The elements of the building are described as if protagonists in the rela-

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[72] See Jonathan Culler, *The Pursuit of Signs: Semiotics, Literature, Deconstruction* (London: Routledge, 1992), 110–11.

[73] Carolyn Steedman, *Dust: The Archive and Cultural History* (Manchester: Manchester University Press, 2001), 147.

[74] This is inspired by Jenny Erpenbeck and Alain Robbe-Grillet's novels: Jenny Erpenbeck, *Visitation*, (trans.) Susan Bernofsky (London: Portobello, 2010); Alain Robbe-Grillet, *Jealousy* (*La Jalousie* [1957]), (trans.) Richard Howard (London: Oneworld Classics, 2008).

tions of the imagined lives there. The fictions aim to build another space interior to the one seen there.

Design as Drawing

Much of my drawing can be found in the twelve A4 sketchbooks used throughout the research [Plates 7, 8, 12, 13, 14, 17]. Other drawings are digital [Plates 23, 44, 45–46, 70, 77]. Both are used to unearth ideas. I begin to draw with an intuition for investigative reasons rather than to reach a preconceived outcome. The drawing then serves as an instruction for the something further, either the next drawing, or a written idea. It both looks back, and projects a future, operating as a critical tool.[75] It analyses, as if searching a scene of crime, its information triggering interpretation [Plates 12–17]. The results are often further questions rather than answers.

Architectural drawing is a production which usually suggests a future form in its lines and coordinates. If its propositions are in fact retrospective rather than in the future, it remaps an existing history. My architectural drawings are empirical research undertaken on site. They constitute an occupation or experience of a space. They develop over time, piecemeal, to reform the objects they investigate.

Throughout this thesis, I have thought of the schema as a spatial temporal trace of existing and potential object relations. In this it is like drawing an architectural survey plan, of a building already in existence. The survey reveals possibilities, becoming a form of design. Throughout the three main chapters I use new plans of the *Maison de Verre*, presented as surveys. Based on the conventions of architectural plans, using scale and proportion of buildings, they are coded with

[75] Amongst others I am influenced by Janice Kerbel, Catherine Bertola, Jane Bustin, Cornelia Parker, John Stezaker, Sharon Kivland, Diller & Scofidio.

the routes, circulations and zones of inhabitants, and presented as dust maps, airy absences, and words alone [Plates 95, 97, 122, 129]. They are used to uncover and draw out aspects hidden from the existing plan of the building. In this sense the plans are a schema for the existing edifice guiding a reading of the space.

Other drawings are collages of photograph, line, image and text. From the French *colle* for glue, collage is on the one hand a process of selecting and adhering material from multiple origins, and on the other implies a slowly emerging, ambiguous image. It suggests signs are read through one another, over and over, and implies something remains hidden behind the surface.[76] Its constructions have gaps and spaces not visible so much as inherent in the overlaps and layers, in their contingency [Plates 7, 14, 22, 23]. The *Large Glass* as a construction acts as a collage, a collection accruing its images over time with gaps between. Its materials, on the glass and as texts, are a collage practice.

The drawing re-situates its sources. As it does so it becomes a new object. For example, my double-sided drawings spatialise a tension between inside and out. Like a window or screen, the two sides are both visible and invisible to each other, with some marks piercing the paper, others remaining hidden. The double-sided drawing questions the primacy of the single image, its object is in-

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[76] Jonathan Hill, referring to film maker, Sergei Eisenstein, and artists John Heartfield and Lazlo Moholy Nagy, suggests that where montage is: 'a language and technique associated with critical intent and used in a number of media' 'a procedure in which one 'text' is read through another', collage, 'although technically little different […] is primarily a formal procedure used in painting.' Jonathan Hill, *Actions of Architecture: Architects and Creative Users* (London: Routledge, 2003), 95–96. I do not agree with the latter statement. In contrast to collage, montage tends to manifest as outcome rather than as processes of composing or reading. Max Ernst's collages, in particular *La femme 100 têtes*, 1929 and *The Master's Bedroom*, 1920 operate as critical, their meaning emerging through the intricacies of painstaking collage and overpainting methods. See Krauss, *The Optical Unconscious* (1994), 65, 81.

complete and ambiguous with the context of its other side to disturb it, playing with what can be seen through its transparency, translucency and opacity [Plates 19–21]. The drawing as object functions as a discussion between drawing and form.

Design as Books

I have used the idea of the book from the beginning of the thesis. Based on walks around Saint Germain in Paris, I constructed map drawings using Eugene Atget's photographs of the city from the early twentieth century. These became a form of remembering what I thought may have been there, near the site of the *Maison de Verre*, and folded into concertina forms [Plates 8, 23].

Book forms also emerged from my early diagrams used to explore the thesis structure. Inspired by Krauss' adaptations of Lacan's L Schema, I also experimented with schemata [Plates 4–6]. The schema is inherently three-dimensional as discussed and I began folding pieces of paper to make physical schemata of the thesis [Plates 5, 24–25]. The use of paper, fold and text expanded into formal book making. In 2011 I enrolled on a ten week artists' book-binding course and learnt to make book structures, bindings, covers and cases.

Artist's books are designs which require engaged reading. Incorporating narrative and experience, textual and visual content are interrelated.[77] The book – combining structure, material, text and image in original ways – is both repository and design tool. Two and three-dimensions simultaneously, between architecture and art, the successful artists' book maintains a balance between reading, handling and viewing. The book construction – binding, size, spine, folds, colour,

[77] See the work of Sarah Bodman, Clare Bryan, Heather Weston, Susan Johanknecht, Judy Kravis and Peter Morgan, Helen Douglas; associated research on the book form at CFPR, UWE, and Camberwell, UAL.

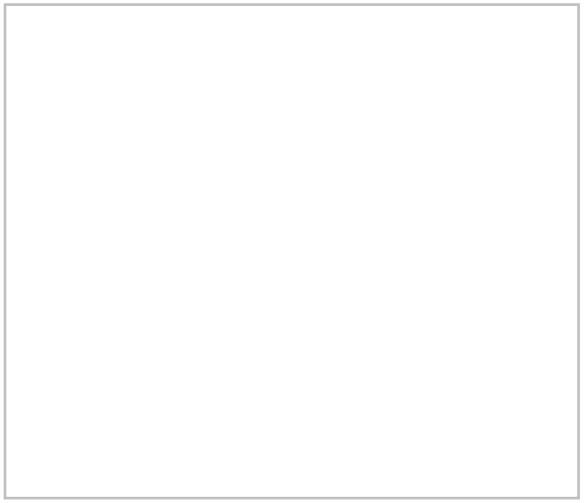

Figure 3.6: Olafur Eliasson, *Your House*, (New York: Library Council of the Museum of Modern Art, 2006).

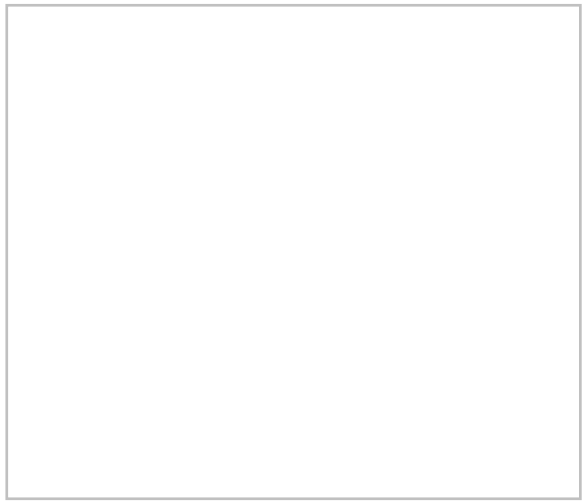

Figure 3.7: Katharine Meynell and Susan Johanknecht, *Emissions* (Gefn Press, London, UK, 1992).

paper stock, typeface, coding and spatial arrangement – is the method for exploring and carrying the subject matter.

The artists' book is a communication and an experience [figures 3.6, 3.7]. The activity of the reader combines with the intentions of the form. The text takes on a materiality. If, as Roland Barthes argues, 'text is a tissue of quotations drawn from the innumerable centres of culture,' the text in an artists' book shifts its three-dimensional potential.[78] With its ability to carry and convey meaning, its interior signification moves from the visual to the mental. As the reader translates and reconstructs its meanings and ideas, he inhabits and colonises it [Plates 26–28].

The books, dust covers and boxed forms I have made include three-dimensional investigations of the *Large Glass* [Plates 33–36] and paper versions of spatial relationships in the *Maison de Verre* [Plate 120–121]. Playing with material, drawing, text, fold, cut and space they reorganise and formalise design work and text into new forms. I return to these ideas throughout the thesis.

Design as Sounds

Lacan frequently invoked language as underpinning consciousness. The 'unconscious is structured like a language', he stated, 'it is the world of words that creates the world of things'.[79] It is specifically spoken language that causes the subject to come into being: 'The unconscious is constituted by the effects of speech on the subject, it is the dimension in which the subject is determined in the devel-

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[78] Roland Barthes, 'Death of the Author', in Roland Barthes, *Image Music Text* (trans.) Stephen Heath (London: Fontana Press, 1977), 148.

[79] Lacan, *Écrits* (1991), 65, 259.

opment of the effects of speech'.[80] Speech allows the subject to recognise itself as such and, rather than vision, is the mechanism through which the subject is continuously unfolded, the basis for psychoanalysis.[81] Lacan's example is that if your daughter, say, is silent, then getting her to speak has two aspects: it is both the desired outcome and the process of analysis itself. 'Analysis', he says, 'consists precisely in getting her to speak.'[82] Speaking is to voice the unspoken, bringing forth the other.

In 'Subversion of the Subject and Dialectic of Desire' Lacan provides a schema, 'Graph II', which shows another temporal sequence describing the construction of the subject. Here, the voice is presented as a leftover slipping off to the side, through time, a by-product of the sequential rotational subject making.[83] Speech is hence a lost object, another remainder, ephemeral. It also projects forward, imagining a future self, through what Lacan calls 'retroversion'. A turning backwards to see forwards. A sense of what 'he will have been'.[84] So the voice is the remnant to 'hear' the past now.

Early in my research I became involved in a short exploratory course at UCL called the 'Creative Thesis'. For this I made a box with openings cut into it.

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[80] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 149.

[81] Lacan, *Écrits* (1991), 360. See also Shari Benstock, 'Authorizing the Autobiographical', in Shari Benstock (ed.) *The Private Self: Theory and Practice of Women's Autobiographical Writings* (London: Routledge, 1988), 12.

[82] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 11.

[83] Jacques Lacan, 'Subversion of the Subject and Dialectic of Desire', in *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge,(1991), 339. See also Mladen Dolar, *A Voice and Nothing More* (Cambridge: MIT Press, 2006), 35.

[84] Lacan, 'Subversion of the Subject and Dialectic of Desire' (1991), 339. This recalls Walter Benjamin's motif of the *Angelus Novus*, a sense of using history to see the future.

When looked into rooms and spaces from the *Maison de Verre* are seen [Plate 29]. I accompanied it with a series of fictional descriptions printed on postcards. It was a sketch, quick and rough, so instead of displaying it, I made a film looking into the box accompanied by spoken recordings of the postcard text using my own and others' voices. The recording unexpectedly transformed the work, its performative aspects brought it to life. Following this I began to record pieces of my fictional texts – imagined aural histories – to be heard with seminar and lecture presentations I made on my thesis.

Using spoken sound recordings had several effects. I became conscious of the role of the speaking voice in the presentation. My presentations overall became more performative and personal. Voice means both audible speech and the agency by which views are expressed. I had, as it were, found a voice. Further, the sound recordings became another way of designing and developing the story, a part-architecture method translating the fictions further. The recordings are reconstructions, translations and disseminations that move away from the visual. As Krauss puts it, the airborne voice is language as a 'refusal of vision'.[85] These aspects are explored further in the chapter 'Air'.

These productions – fictions, drawings, books, sounds – operate in an architectural territory between building, drawing and writing, as an 'expansion' of architectural practice.[86] Presented throughout the text as parallel investigations, they accumulate, inform, cross-refer, index and contradict each other in non-hierarchical

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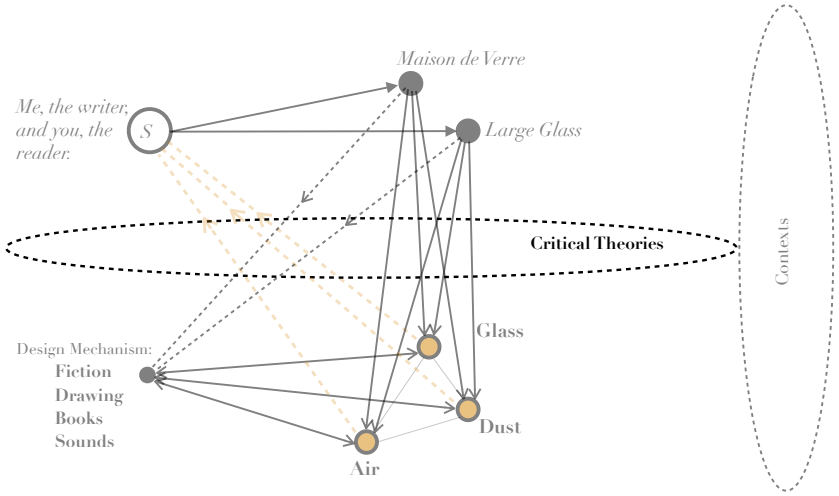
[85] '*Lacan, it struck me, provided a key to this refusal, a way of giving it a name.* Then its language, one might say, it's text that's the refusal of vision.' Krauss, *The Optical Unconscious* (1994), 22.

[86] Hélène Frichot, 'Following Hélène Cixous' Steps Towards a Writing Architecture', in *Architectural Theory Review*, Vol. 15/3 (2010), 313.

ways, reshaping architectural design as a body of research. As a collection they also form an archival project to the thesis, housed together to form a collection with different possible interpretations [Plate 30].



Critical Theories

Citing Jacques Deleuze's assertion that 'theory is exactly like a box of tools', Jane Rendell describes 'critical theory' as that which 'demands and also allows the historian to make explicit their interpretative agenda'.[87] As Deleuze explains, the-

[87] See Rendell, 'From Architectural History to Spatial Writing' (2006), 137. 'Intellectuals and Power: A Conversation Between Michel Foucault and Jacques Deleuze', in Michel Foucault, *Language, Counter-memory, Practice: Selected Essays and Interviews*, (trans.) Donald F. Bouchard (Ithaca: Cornell University Press, 1977), 208, cited by Rendell, 'From Architectural History to Spatial Writing' (2006), 138. She goes on to say, 'critical theory however does not aim to prove a hypothesis nor to prescribe a particular methodology, instead it offers a myriad of self-reflective modes of thought'.

ory is not 'for itself' but a proactive activity.[88] In this thesis, I have used various pieces of theory as references and methods of clarifying my own position, including the Lacanian psychoanalysis already discussed, Mieke Bal on narratology, and Carolyn Steedman, Jacques Derrida and Walter Benjamin on the archive and history. This is not an exhaustive list, other thinkers' work is referenced throughout the chapters, including Sigmund Freud, Frederick Kiesler, Mary Lynn Stewart, Siegfried Giedion and Luce Irigaray. The references I discuss now, though, introduce the main external ideas which underpin the work.

Narratology

My thesis argues that objects and spaces are understood through narrative. Following Bal's work on narrative and narratology as methods for a spatial art writing, I assert narrative as a basis for rethinking architectural criticism.[89] Following 1920s Russian formalism, the work of Roland Barthes and Alain Robbe-Grillet, for example, develops narratology as a structuralist process exploring effects, systems, structure, criticism and detail in literary forms.[90] Focussing on the *space* of meaning within the text, the position of the reader is made important as both external to the text, receiving information, and internal to the text as an interpreter of new meaning.

In this thesis, I use these ideas in several ways. I extend the definition of architecture by proposing that it is constructed not only as a physical entity but as

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[88] 'Intellectuals and Power' (1977), 208.

[89] Mieke Bal, *Looking In: The Art of Viewing*, (Amsterdam: G+B Arts, 2001).

[90] See R. B. Kerschner, *The Twentieth-Century Novel: An Introduction* (Boston: Bedford Books, 1997), 24–25. See also Roland Barthes, *S/Z,* (trans.) Richard Millar (New York: Hill and Wang, 1997); and Alain Robbe-Grillet, *For a New Novel: Essays on Fiction,* (trans.) Richard Howard (New York: Grove, 1965).

a series of narratives. If the object of narrative is storytelling, it suggests a sense of progression, whether linear, repetitive or convoluted, from beginning to middle to end. On the other hand, narratology, although subject to storytelling, explores the processes of constructing and unfolding, crafting and experiencing.

Like Bal, I argue that the narratology of an object emerges through a dialogue of materials, spaces and events. If architecture houses historical episodes in its structure, sequences of space, material, and detail, narrative strands unfold there in the mind of the viewer, and in memory. Spaces, whether buildings, installations, sculptures or objects, suggest characters, events, cities. These are spoken, remembered, felt or thought. In this way, narratology rethinks the discourse of architecture. Its dialogues, existing elusively, require translation into text, drawing or voice. Like psychoanalytic ones, they are brought into theory or consciousness through words. An architectural narrative text recounts the relationships between the body, object, three dimensional space, politics and society.

In the three main chapters of my thesis, narrative accounts of the *Large Glass* prompt those of the architecture of the *Maison de Verre* to yield new constructions of both.

Archive and History

As argued, the accepted architectural accounts of the *Maison de Verre* present it as a fixed empty form rather than part of a historical discourse examining the open plan domesticity and operations of the medical spaces.

Setting out to address this, I initially found few primary materials to expand on. With no formal archive and no surviving original inhabitants, I wrote to several descendants and figures associated with the building to enquire about further material. I either received no reply or was told that all archival material had been published. Yet there are no descriptions or records of visitors, nor the gy-

naecological procedures advised or performed in the clinic, including, as I speculate, abortion and birth control. These, due to their illegality at the time, were perhaps unrecorded, removed, or destroyed.

My response to this lack of material is to review the role of the archive through Steedman, Derrida and Benjamin. In *Dust*, Steedman argues that contemporary history writing is still reliant on the nineteenth century practice of trying to create unambiguous factual events from the past, rather than places of memory and ambiguity.[91] For her, dust signifies both the literal dust of the aged archive, where 'the past lives', and a critique of the primacy the archive is afforded as 'the immutable, obdurate set of beliefs about the material world, past and present.'[92] The archive, writes Steedman, 'cannot help with what is not actually there, with the dead who are not really present in the whispering galleries, with the past that does not, in fact live in the record office, but is rather, *gone*'.[93]

Dust is, in part, a response to Derrida's *Archive Fever.*[94] In this short text, based on a lecture, Derrida reminds us that 'archive' comes from the Greek *arkheion* meaning 'a house, a domicile, an address.'[95] The *arkheion* was not merely any house but the most important house of the *archons*, the magistrates who, as the heads of the community had authority to select and house certain documents for safeguarding and interpretation. The documents 'dwell' in the house in an 'in-

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[91] Steedman, *Dust* (2001).

[92] Steedman, *Dust* (2001), 70, ix.

[93] Steedman, *Dust* (2001), 81.

[94] Jacques Derrida, *Archive Fever: A Freudian Impression*, (trans.) Eric Prenowitz (London: University of Chicago Press, 1996).

[95] Derrida, *Archive Fever* (1996), 2.

stitutional passage from the private to the public'.[96] The archive is, therefore, already a spatial and political act; the house where a particular version of the past predominates, through decisions on inclusion and exclusion, relevance and irrelevance. It is a selection, its subject matter decided upon by those in authority, before it becomes a collection. Derrida continues, '*every* archive […] is at once *institutive* and *conservative*. Revolutionary and traditional.'[97] The collection's relevance has been predetermined by its keepers. It replaces memory yet cannot be memory.[98]

Benjamin's approach to history is to grasp the aspects threatened by loss, and structure them into contingent narratives, an assemblage of possibilities.[99] In 'Theses on a Philosophy of History' he writes, 'The true picture

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[96] Derrida, *Archive Fever* (1996), 2–3.

[97] Derrida, *Archive Fever* (1996), 7.

[98] See also Roland Barthes, 'The Reality Effect', and 'The Discourse of History', in Roland Barthes, *The Rustle of Language* (trans.) Richard Howard (Los Angeles: University of California, 1989), 127–140, 141–148; Susan Stanford Friedman, 'Making History: Reflections on Feminism, Narrative and Desire', in Susan Stanford Friedman, *Mappings: Feminism and the Cultural Geographies of Encounter* (Princeton, NJ: Chichester: Princeton University Press, 1998), 199–227.

[99] Walter Benjamin, *The Arcades Project*, (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002); Walter Benjamin, 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations*, (trans.) Harry Zohn (New York: Schocken, 1988), 217–251; 'Paris, Capital of the Nineteenth Century', in *Reflections,* (trans.) Edmund Jephcott (New York: Schocken, 1989), 146–162; *Selected Writings, Volume 2 1927–1934*, (trans.) Rodney Livingstone (1999), in particular 'Short Shadows I', 268–277; and 'Little History of Photography', 507–531; *Selected Writings, Volume 3 1935-1938*, (trans.) Rodney Livingstone (London: Belknap Press, 2002); Pierre Missac, *Walter Benjamin's Passages*, (trans.) Shierry Weber Nicholsen (Cambridge: MIT Press, 1995); Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (London: MIT Press, 1991); Esther Leslie, *Walter Benjamin* (London: Reaktion Books, 2007); Elliot, *Benjamin for Architects* (2011). Additionally: T. J. Demos, *The Exiles of Marcel Duchamp* (London: MIT Press, 2007), cross refers Duchamp to Benjamin.

of the past flits by. The past can be seized only as an image which flashes up as an instant when it can be recognized and is never seen again […] every image of the past that is not recognized by the present as one of its own concerns threatens to disappear irretrievably.'[100] In the foreword to English edition of *The Arcades Project*, the translator points out that Benjamin did not use the modes of 'traditional historiography', that is the collecting together of 'the great men and celebrated events', but rather studied 'the "refuse" and "detritus" of history, the half-concealed, variegated traces of the daily life of "the collective" […] with the aid of methods more akin […] to the methods of the nineteenth-century collector of antiquities and curiosities, or indeed to the methods of the nineteenth-century ragpicker, than to those of the modern historian.'[101]

Benjamin recognised that the detritus of history may be more important than the gloss. For example, *The Arcades Project* is an attempt to create a critical archive before the history of the nineteenth century was lost. The figure of the arcades, pulled down by Georges-Eugene Haussmann's reforms, is translated into a written narrative recreating the arcade in a different guise. Unfinished as the text is, the transference from the past is incomplete, paused. It remains fragmented, a partial object.[102]

History, although it seeks a form of truth, must recognise that absolute truth is an impossibility. Susan Stanford Friedman calls this the 'working out of a subjectivist epistemology' where 'the Real of history is knowable only through its

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[100] Walter Benjamin, 'Theses on the Philosophy of History', in Illuminations, (trans.) Harry Zohn (New York: Schocken, 1988), 255.

[101] Benjamin, *The Arcades Project* (2002), ix.

[102] As Benjamin writes: 'The historical materialist cannot do without the notion of a present which is not a transition, but in which time stands still and has come to a stop.' Benjamin, 'Theses on the Philosophy of History' (1988), 262.

written or oral textualizations'.[103] She contrasts this with a 'positivist' one whose 'goal is an objective account'.[104] For me, although facts undoubtedly exist, their significance depends on the writer or spectator's point of view. History is always an interpretation. Further, the ephemeral subjectivity of experience cannot be archived. Derrida points out that Freud's contribution to the archive is to show this very contradiction: going back over original experience, though the fundament of psychoanalysis, 'reveals that the records of an original experience do not exist, to which we may return.'[105] The nature of the truth regarding the subjective experience of the past, though important, is ultimately unknowable. The archive is, then, always a partial story halfway through. In the case of the *Maison de Verre* the seeming lack of archival material means that beyond the evident facts, the building's deeper truths – stories of its female, medical or social occupations – are hard to substantiate. My work straddles the tension inherent in trying to know the facts and being unable due to their very nature as unrecordable human experiences.

Writing an architecture is a process of identifying the various and multiple objects, identities, events and subjects of place. As Derrida states, 'the archive takes place at the place of originary and structural breakdown of said memory. *There is no archive without a place of consignation*'.[106] For Benjamin, the arcade is not an accidental motif – he consciously uses architecture, in particular glass

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[103] Friedman, 'Making History' (1998), 201. The Real comes from Lacan's definition.

[104] Friedman, 'Making History' (1998), 201.

[105] Derrida, *Archive Fever* (1996), 91.

[106] Derrida, *Archive Fever* (1996), 11.

architecture, as not merely a representation of, but the place of modernity.[107] As Brian Elliot states, Benjamin makes a 'consideration of architecture as a crucial medium and repository for the intersection of personal and shared cultural memory'.[108]

For me, the *Maison de Verre*, like the archive and the L Schema, is a place of memory. As a repository of the unrecorded, it is a potential description of the past. I therefore position it, the house itself, as a form of archive – a collection of objects to be interpreted.[109] The role of the writer is to use research to create experience. Based on the available facts and other parallel histories, I therefore write a truthful history which interprets the house. Rather than absolute truth, the final narrative is part critical enquiry, part fiction and part proposal. A partial history-writing.

Scrutinising the house itself through repeated visits, I have approached its materials as clues to now absent bodies and scenes, social and sexual, political and artistic. My writing becomes an interpretation of an amalgam of factual traces against a potential loss of an understanding of a time. It differs from both ordinary architectural criticism by working backwards and forwards, as history and proposition at the same time.

Lacan's Glass, Dust, Air

This chapter ends with a reiteration of Lacan's object. Whilst analysing his complex writing I was also working on my theory that glass, dust and air are intrinsic

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[107] Walter Benjamin, 'Experience and Poverty', in *Selected Writings, Volume 2 1927–1934*, (trans.) Rodney Livingstone (London: Belknap Press, 1999), 731–8.

[108] Brian Elliot, *Benjamin for Architects* (London: Routledge, 2011), 1.

[109] I return to this in detail in 'Dust'.

materials to the *Maison de Verre* and the *Large Glass*. I determined that Lacan's *objet petit a* is guided by three parallel concepts: the visual, the remainder, and the voice. Firstly, with the visual, Lacan's object is rooted in looking. Initially he follows Jean Paul Sartre's phenomenological 'look', which acknowledges the existence of the other in the process of looking: looking at the other contains the possibility of being seen, and looked back at.[110] Lacan develops this by separating the eye from the gaze. On one side the eye exists which looks at the object; on the other side the gaze of the object looks back: '*You never look at me from the place from which I see you*', he says.[111] Gaze and eye are not in the same place.

Secondly, with the remainder, Lacan argues that objects are always partial, or incomplete, 'not because these objects are part of a total object, which the body is [incorrectly] assumed to be, but because they only partially represent the function that produces them.'[112] They are part of the body and its physical biological function yet embody desire. Lacan indicates that when desires are met the object can be partially missed, slipping out onto the margins, forgotten. He uses the term *reste* in French repeatedly, to indicate this 'leftover' or 'remainder' of desire.[113] In this way, the object is a remainder dropped away from the body. As

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[110] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 84; see also Dylan Evans, *An Introductory Dictionary to Lacanian Psychoanalysis* (New York: Brunner-Routledge, 1996), 73; Jean-Paul Sartre, *Being and Nothingness* [1943], (trans.) Hazel E. Barnes (London: Routledge, 1969), 259–261, 277.

[111] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 103.

[112] Lacan, 'Subversion of Subject and Dialectic of Desire in the Freudian Unconscious' (1991), 349. My italics.

[113] Lacan, 'Seminar on "The Purloined Letter"' (2002), 56. *The Four Fundamental Concepts in Psychoanalysis* (1991), 17–64. See also Evans, *An Introductory Dictionary to Lacanian Psychoanalysis* (1996), 129; Bruce Fink, *The Lacanian Subject: Between Language and Jouissance* (Princeton: Princeton University Press, 1995).

he says, like slag, 'the remainder is always fruitful', indicating its potential for being recycled as an ongoing connection with the subject.[114]

The third definition expands the part-object – usually thought of as another body or part of the body, often the breast or phallus – to include temporary registers, in particular the voice, but also 'the phoneme, the gaze, […] faeces and flow of urine and the nothing'.[115] Lacan goes on to say that these objects in common: 'have no specular image, or, in other words, alterity. It is what enables them to be the "stuff", or rather the lining – without, nevertheless, being the flip side – of the very subject that one takes to be the subject of consciousness.'[116] The voice, critical in forming the subject as outlined earlier, is invisible, always a remainder or by-product, and therefore lost.

Importantly, this three-way split does not indicate three separate objects but different framings of the same object, reunited by the systematic movement of the L Schema. My concepts of glass, dust and air align with these definitions and their sense of being different descriptions of the same thing. Glass is a material example of Lacan's visual. Splitting object and gaze, clear glass stands in for sight, and translucent glass becomes a sensual substance intervening. Dust, a collection of minute objects dropped off the body, signifies the Lacanian remainder, or remnant. It is a trace of loss and desire. Finally, air is the medium enabling the existence of the voice. Invisible, it allows the temporary passage of sound preserved from the specular field, that is, mirror or glass. The following chapters, 'Glass', 'Dust' and 'Air', are underpinned by these ideas.

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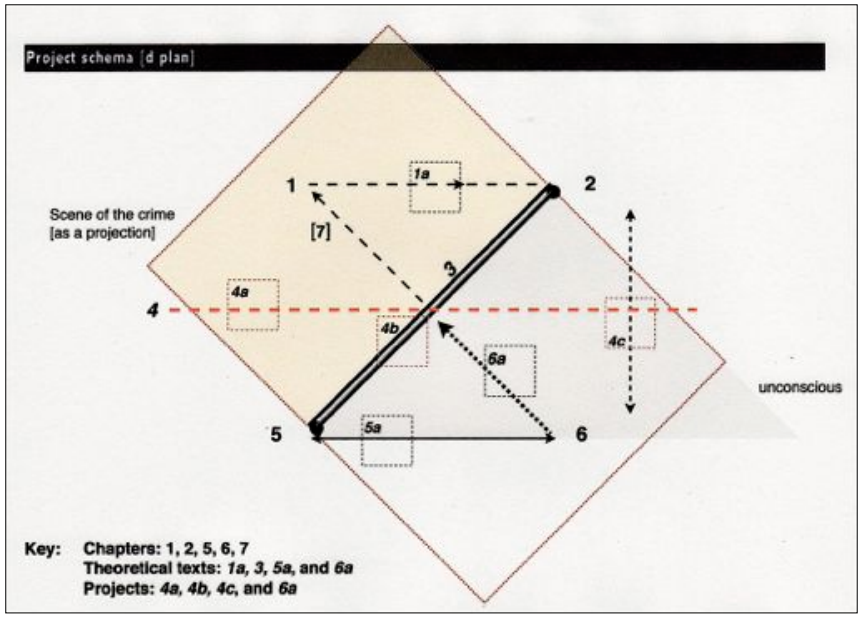
[114] Lacan, *The Four Fundamental Concepts in Psychoanalysis* (1991), 134.

[115] Lacan, *Écrits* (2002), 693. Also, Lacan, *Écrits* (1991), 360.

[116] Lacan, *Écrits* (2002), 693.

Plate 4: Experimental versions of part-architecture as L Schema, 2009.



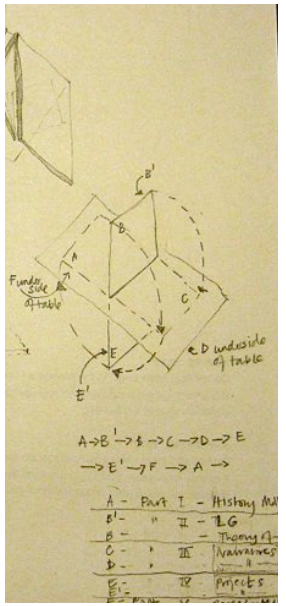
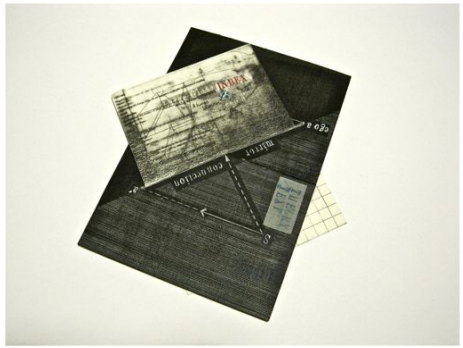
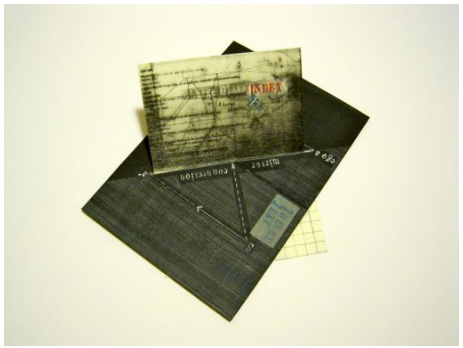
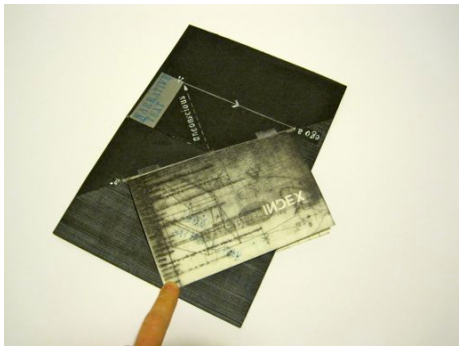


Plate 5: Three-dimensional experimental version of part-architecture as L Schema, 2009.







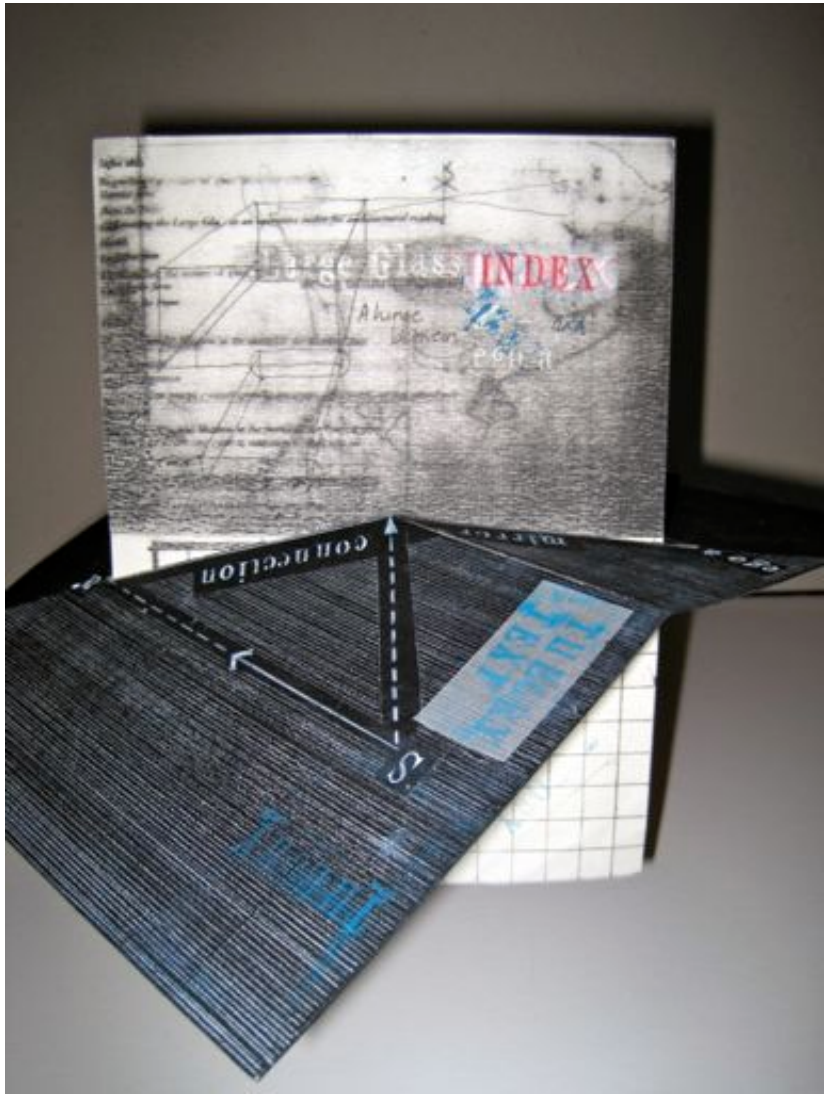
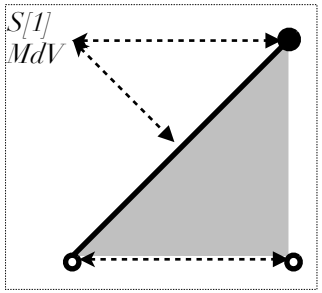


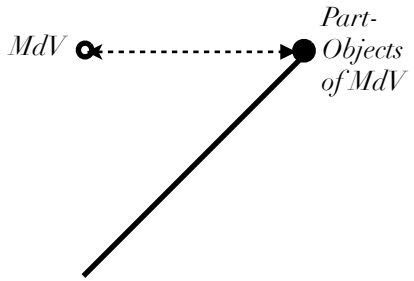
Plate 6: Part-architecture schema experiment, 2011.

1



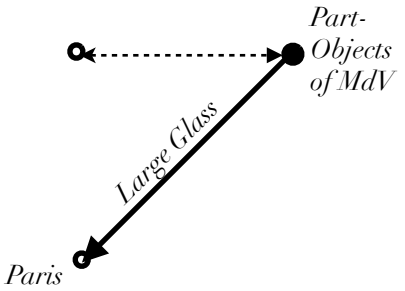
The *Maison de Verre* is a subject S[1] with its parts spread over a field.

2



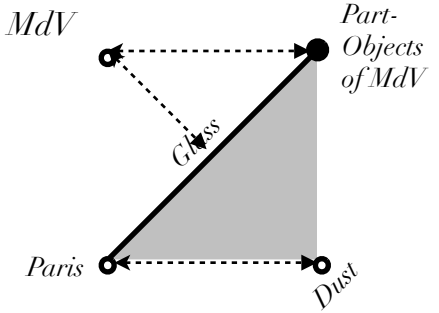
The subject first recognises its part -objects.

3



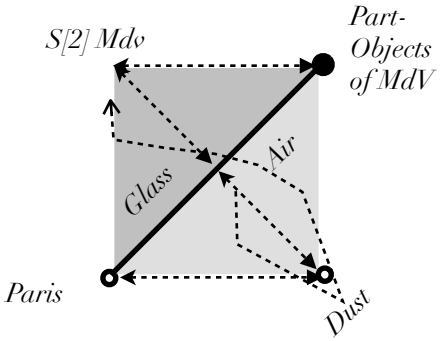
The *Large Glass* becomes the mirror set between the *Maison de Verre's* objects and Paris as a history and *context.*

4



Glass takes the place of the *Large Glass*. Dust is the social history as stories hidden behind the Glass.

5



Air is the communicative device that translates Dust *moves back through the* Glass *to recreate the* Maison de Verre *as a new subject, S[2]*

Plate 7: Sketch drawing of whole thesis, 2007.

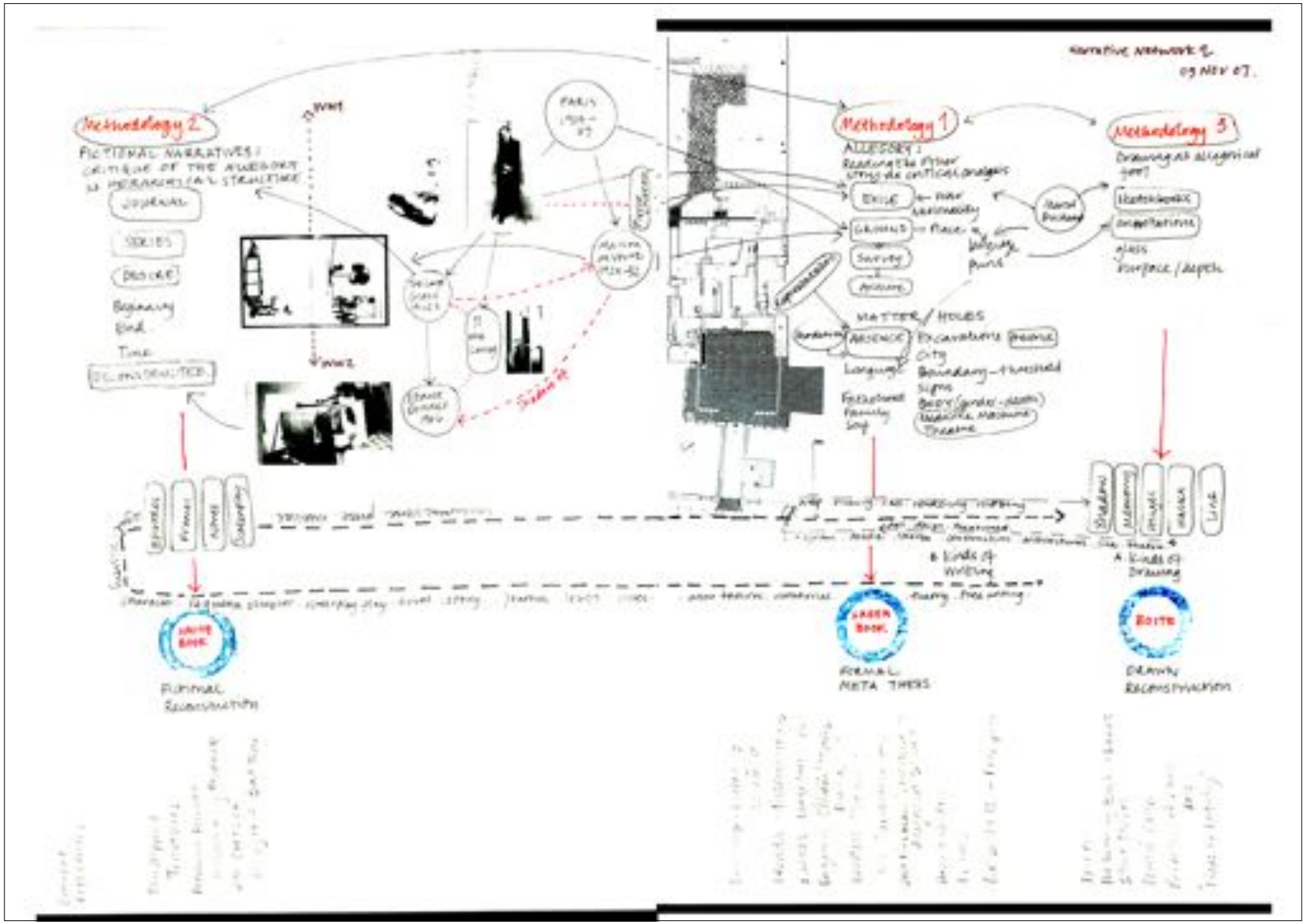
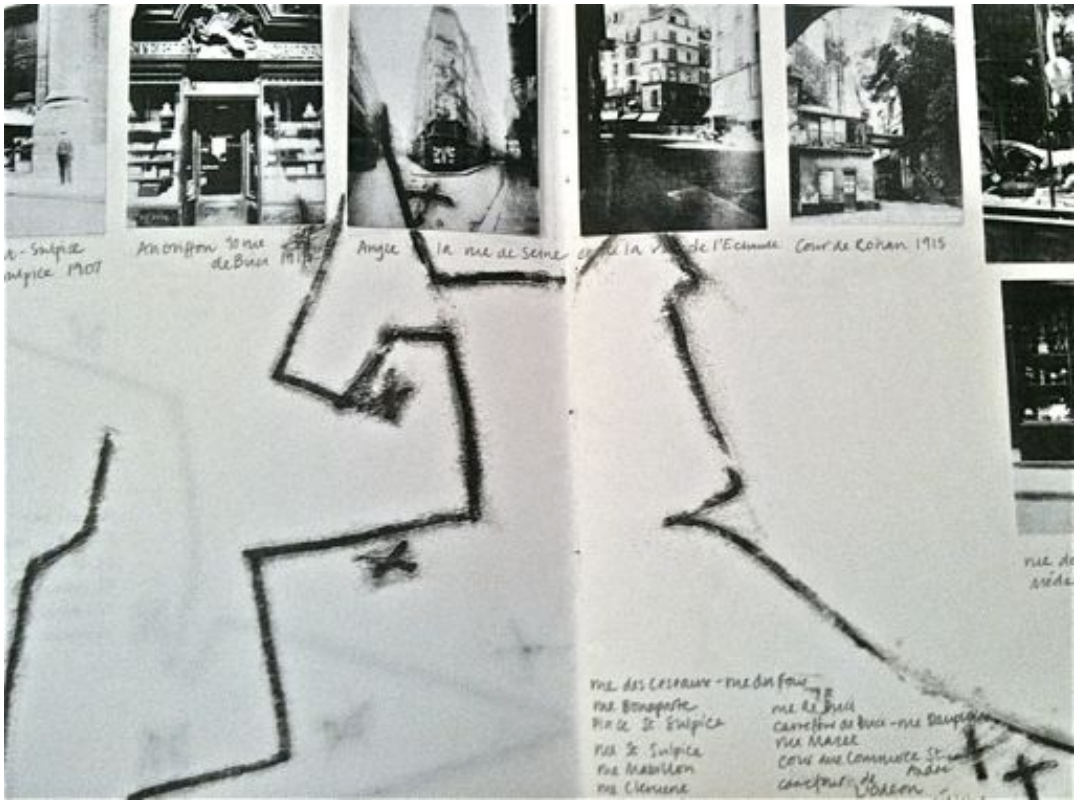


Plate 8: Sketch drawing of Paris, 2007.
Sketch drawing of *Maison de Verre* and courtyard, 2007.



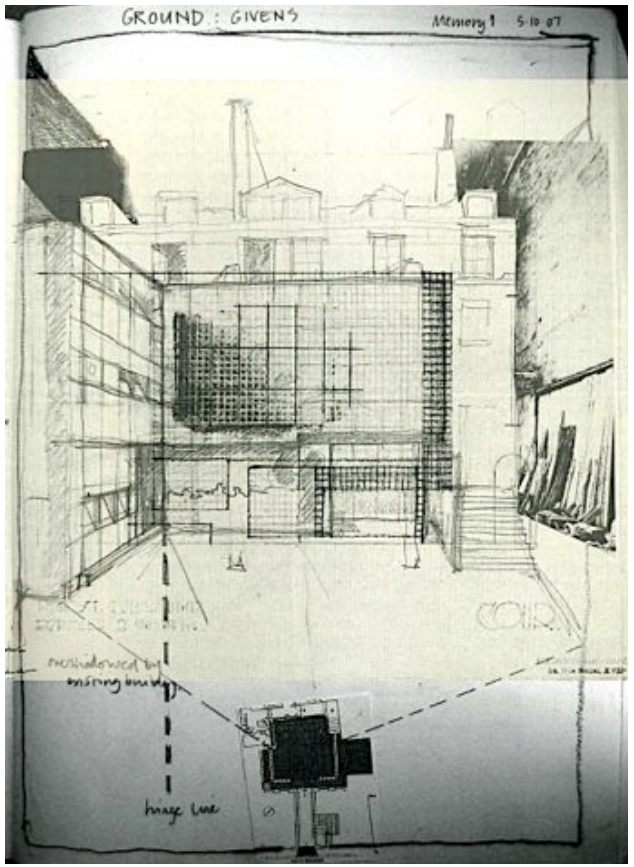


Plate 9: Book of early analytic drawings, 2008 09. (**left**) study of layers of glass façade receding into the *Maison de Verre*. December 2007.

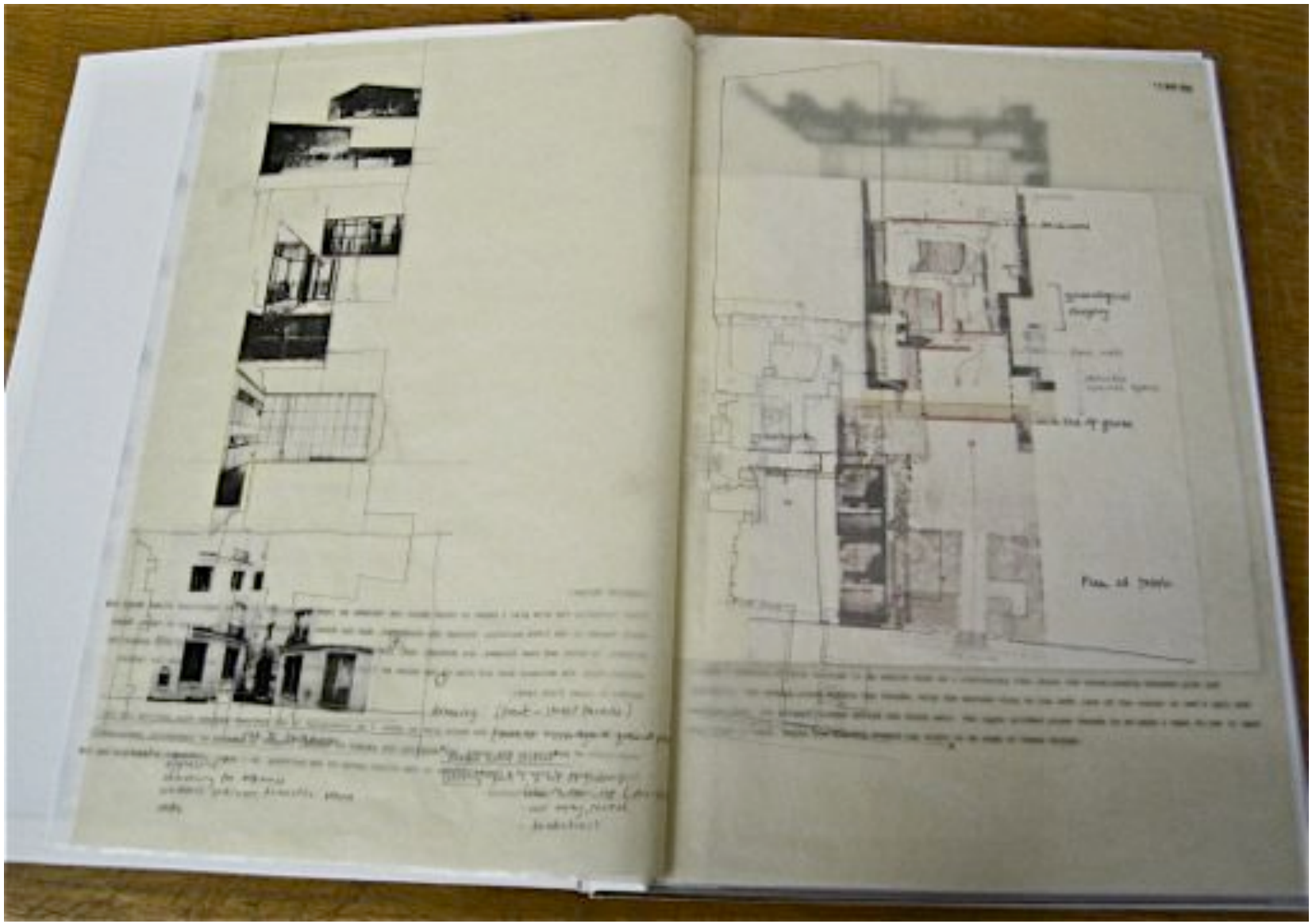


Plate 10: Book of early analytic drawings, 2008 09.

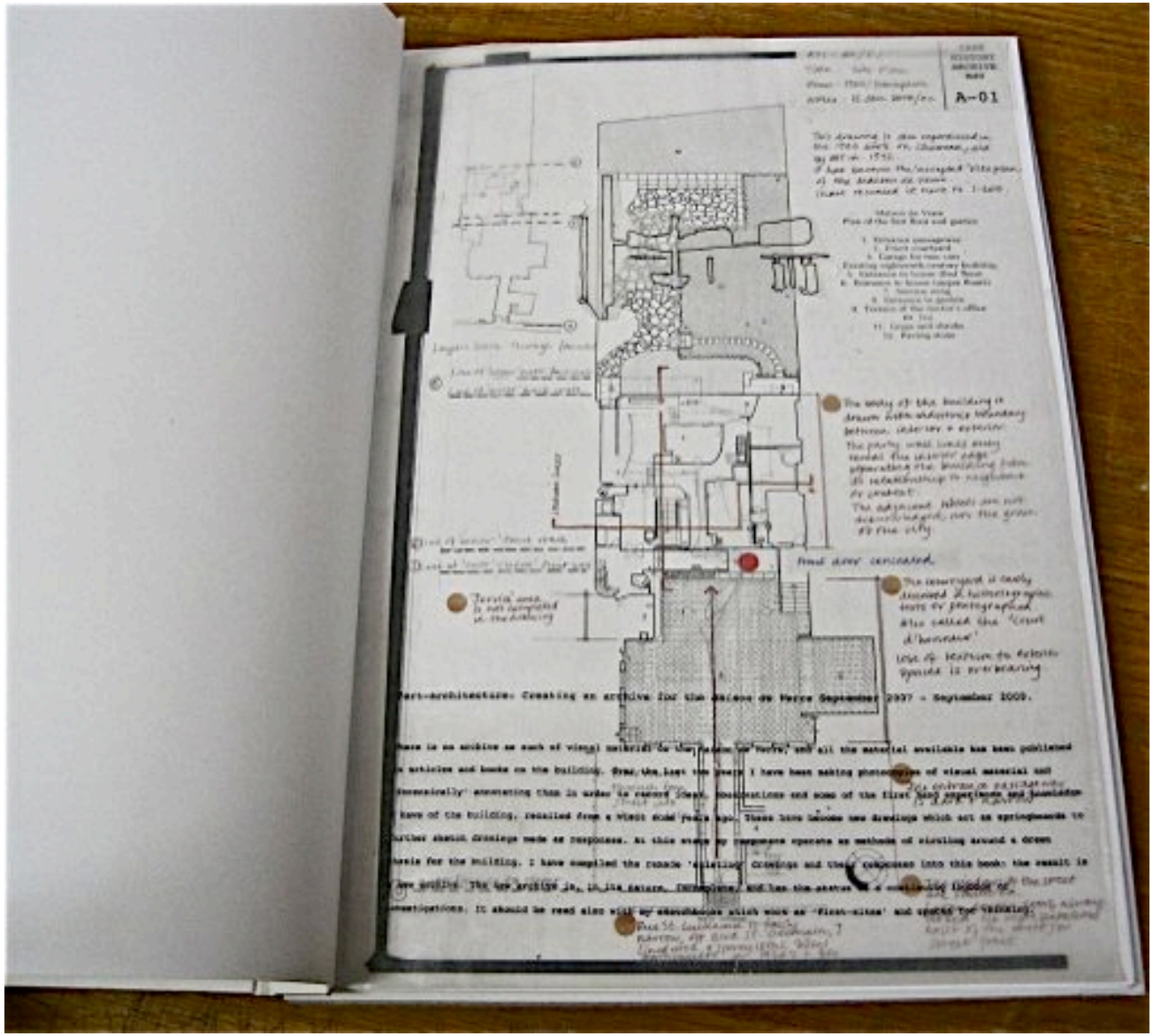


Plate 11: Sketchbook of *Maison de Verre* research, 2008.

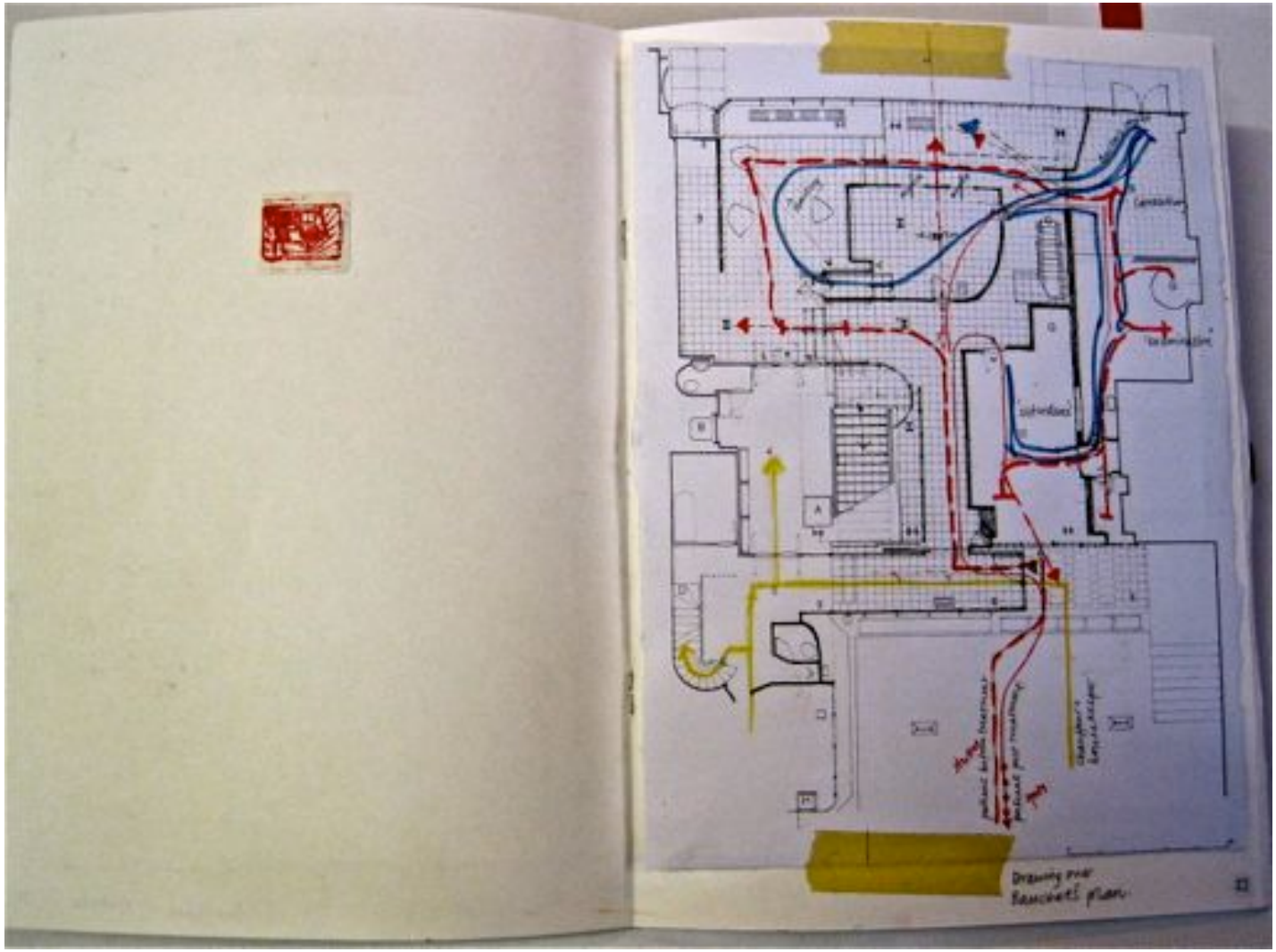


Plate 12: Sketchbook of *Maison de Verre* research, 2008.

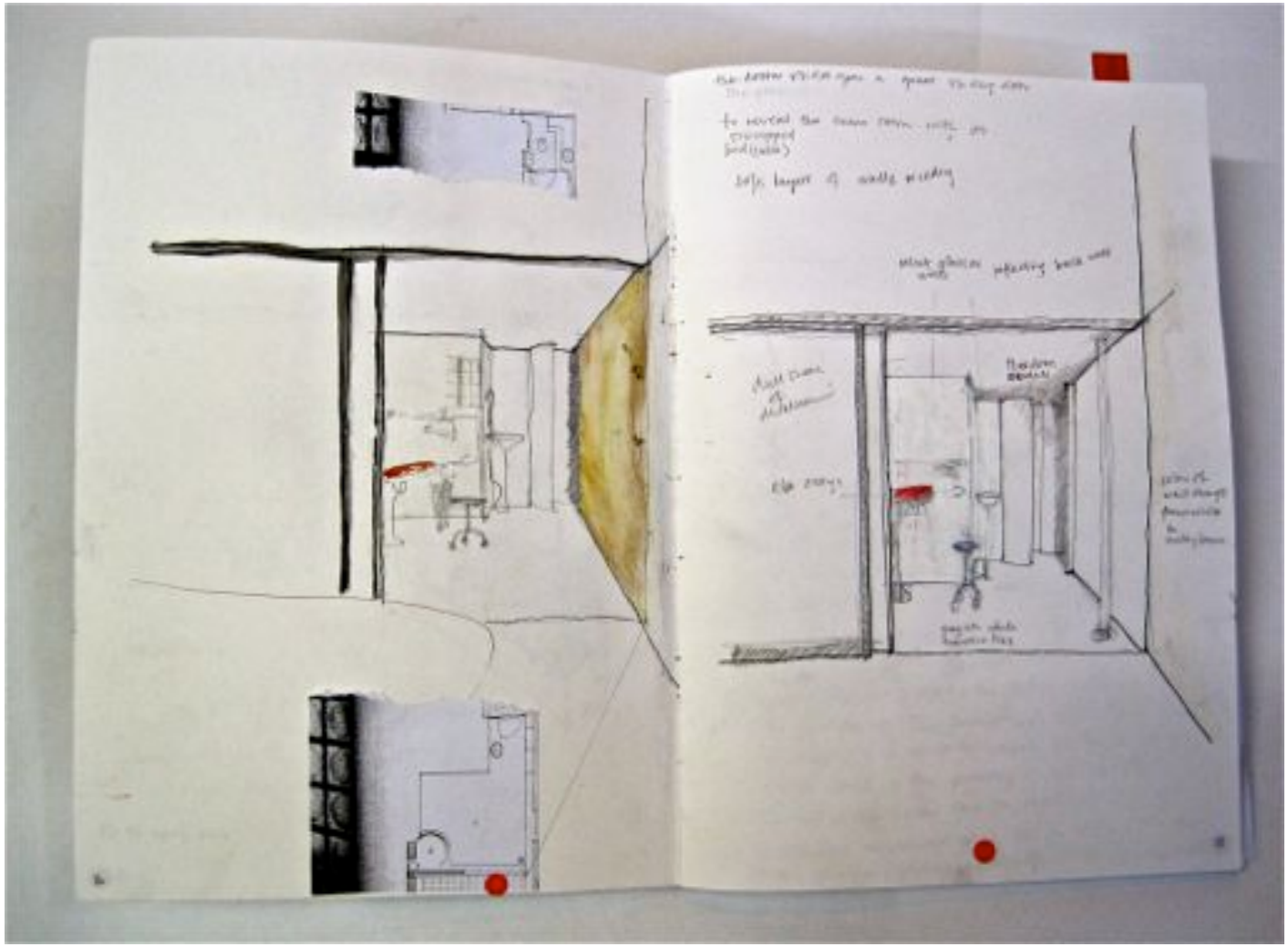


Plate 13: Sketchbook of *Maison de Verre* research.
Cut facade of the *Maison de Verre*.
Pencil, collage plan, ink, photocopies, 2007.

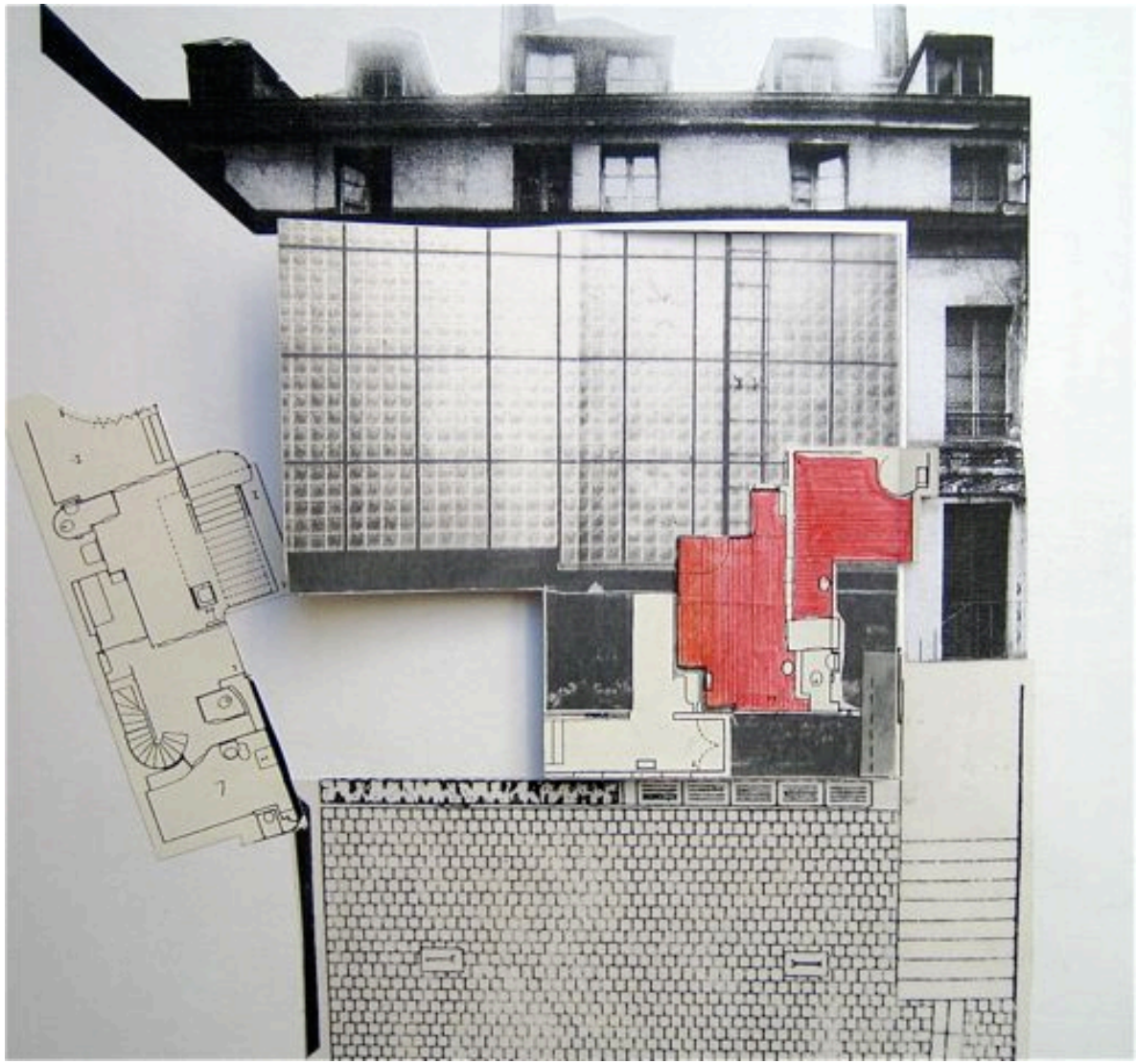


Plate 14: Plan drawings, 2008.

Plate 15: Plan collage, 2007.

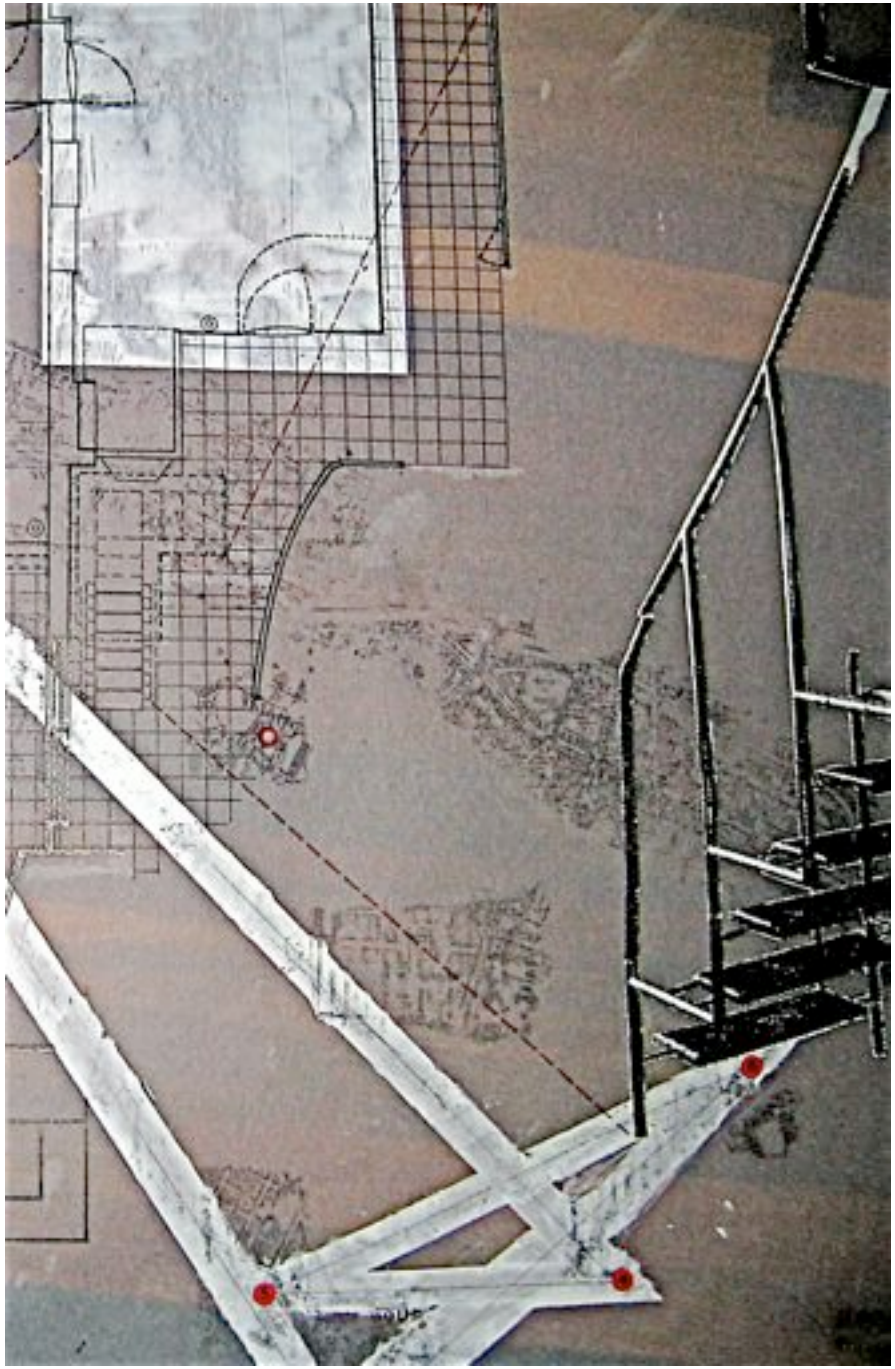
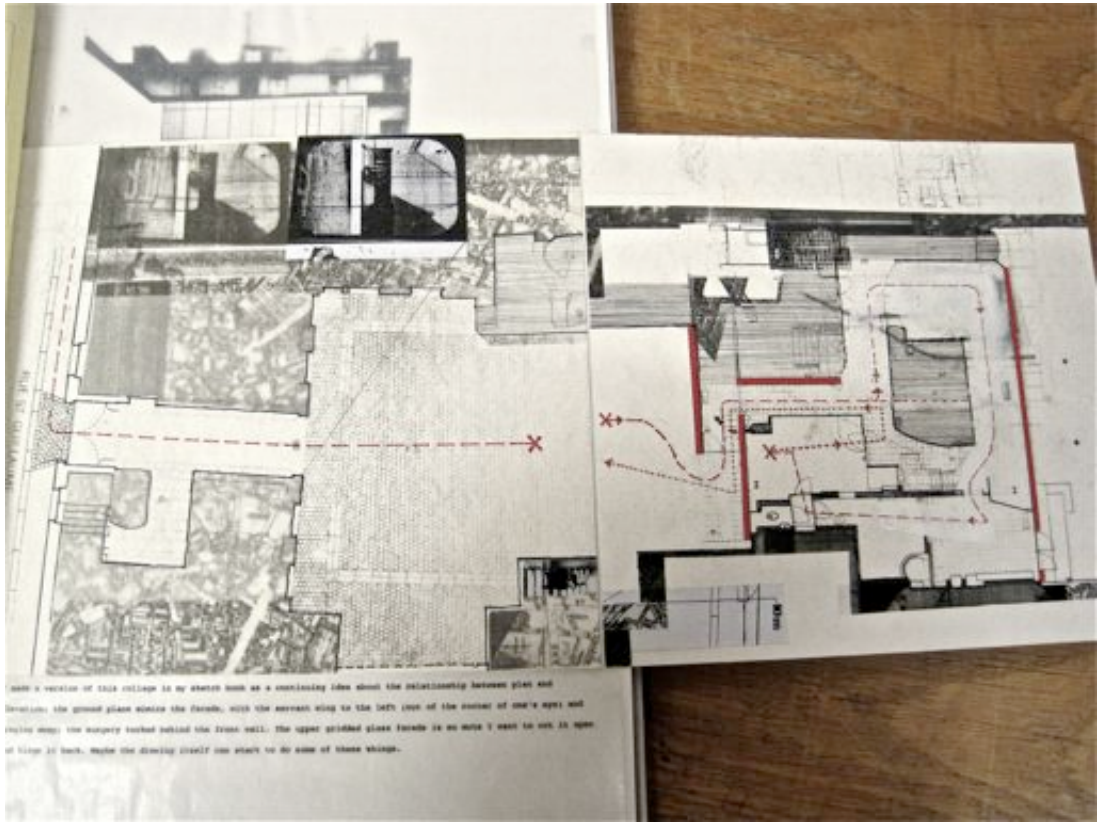


Plate 16: Sketchbook research, 2008.



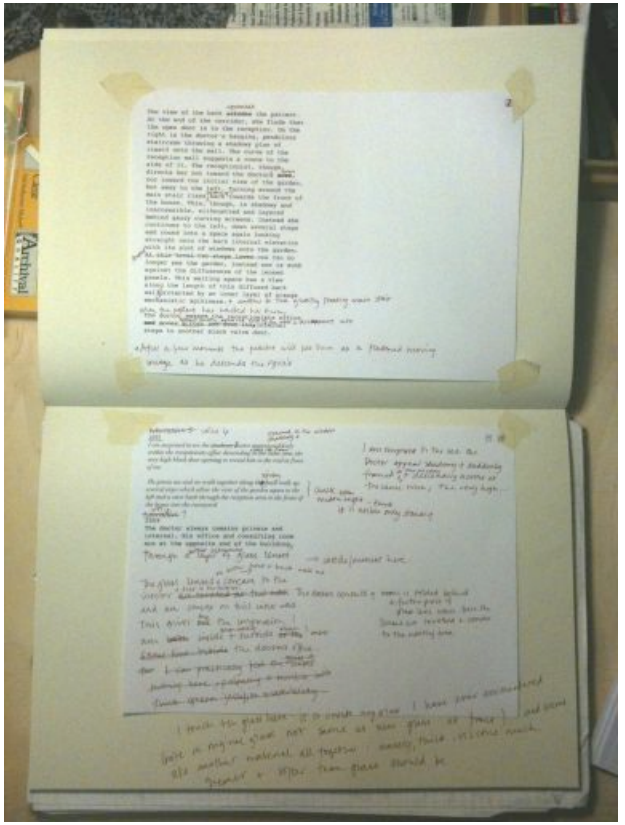


Plate 17: Sketchbook of *Maison de Verre* research.
Surgery, 2008.

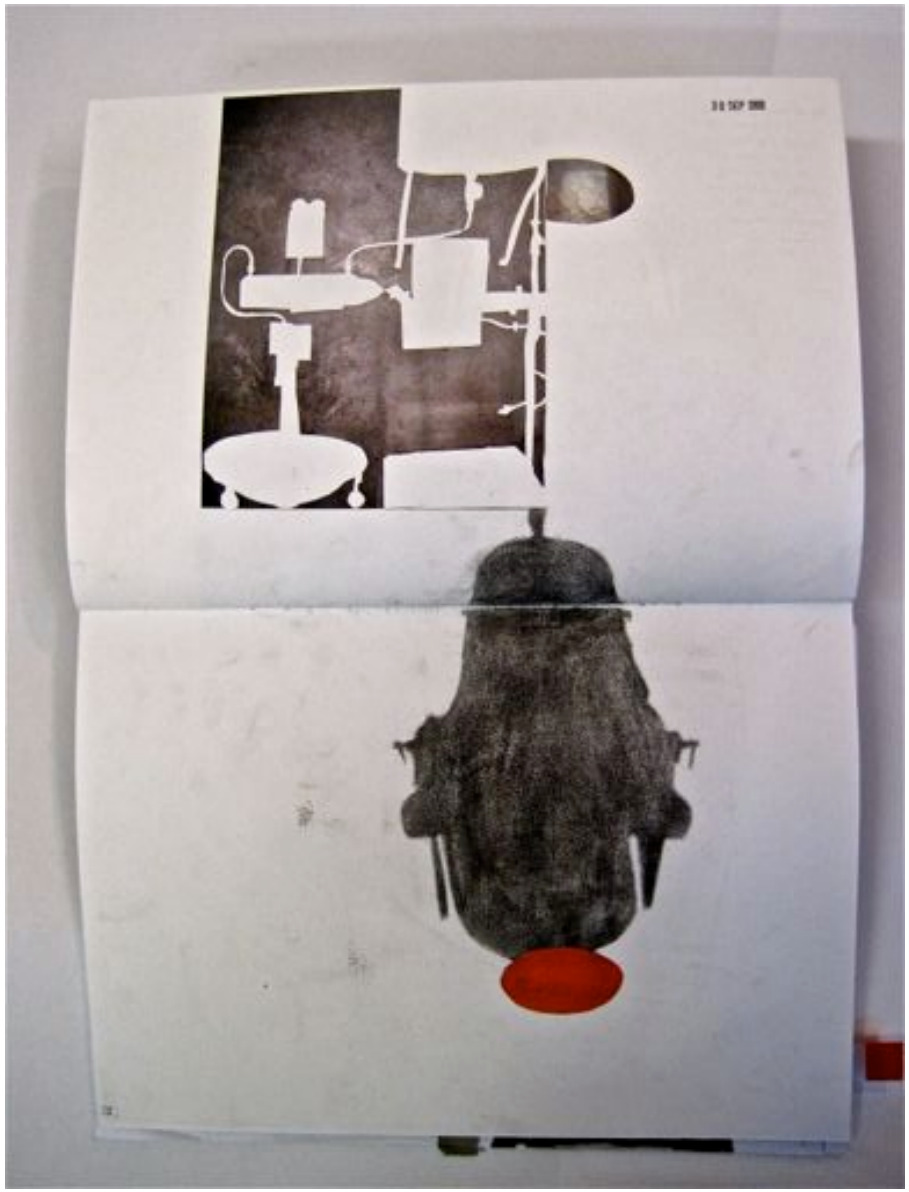


Plate 18: Double sided maps,
pencil, photocopies, red stickers, pinprick holes and cuts on watercolour paper and yellow card, 2009.

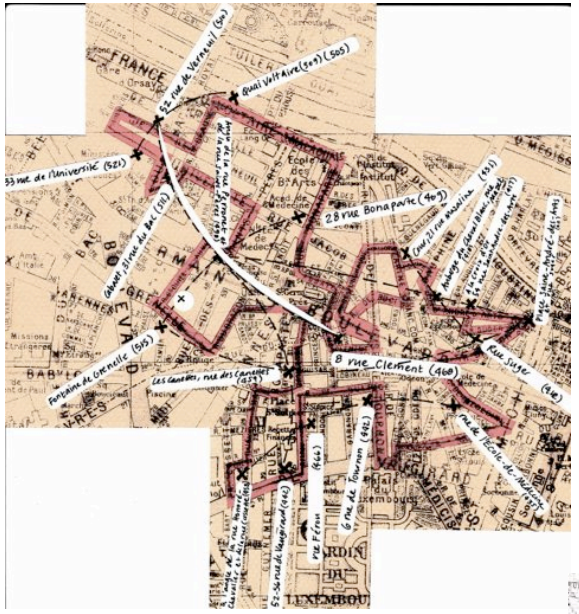

FRANCE
28 rue Bonaparte (409)
8 rue Clement (460)
Rue Jacob
Rue Jacob (462)
Rue Bonaparte (409)
Rue Jacob (462)
Rue Jacob (462)
Rue Jacob (462

Plate 19: *The View From Here Exhibition: Double–Sided Map, Paris 1931*, wooden frame, glass, easel, paper, photocopies, photoshop, pencil, ink, red stickers, cut outs, light, 2009.

Plate 20: *The View From Here Exhibition: Double–Sided Map, Paris 1931*, wooden frame, glass, easel, paper, photocopies, photoshop, pencil, ink, red stickers, cut outs, light, 2009.

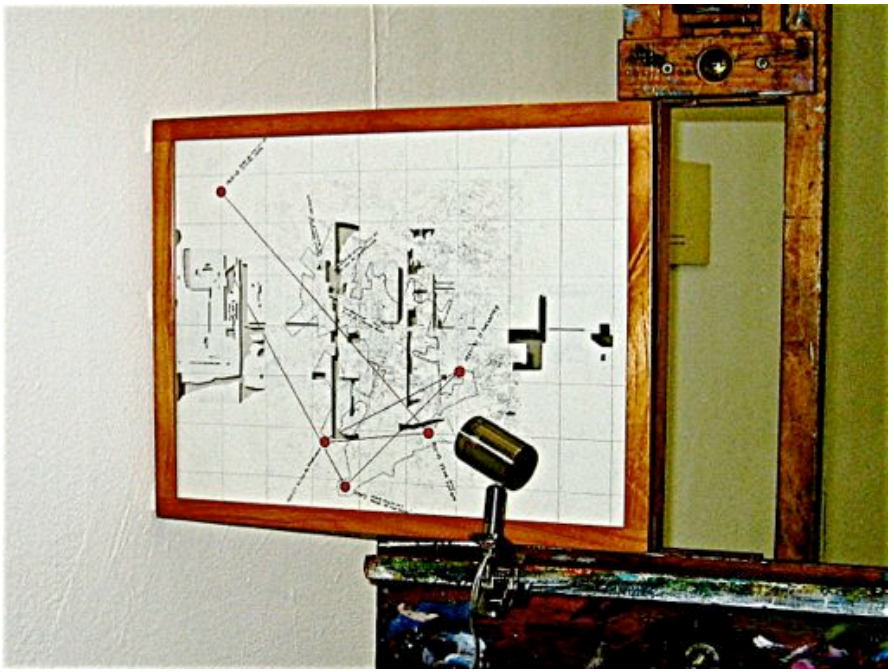
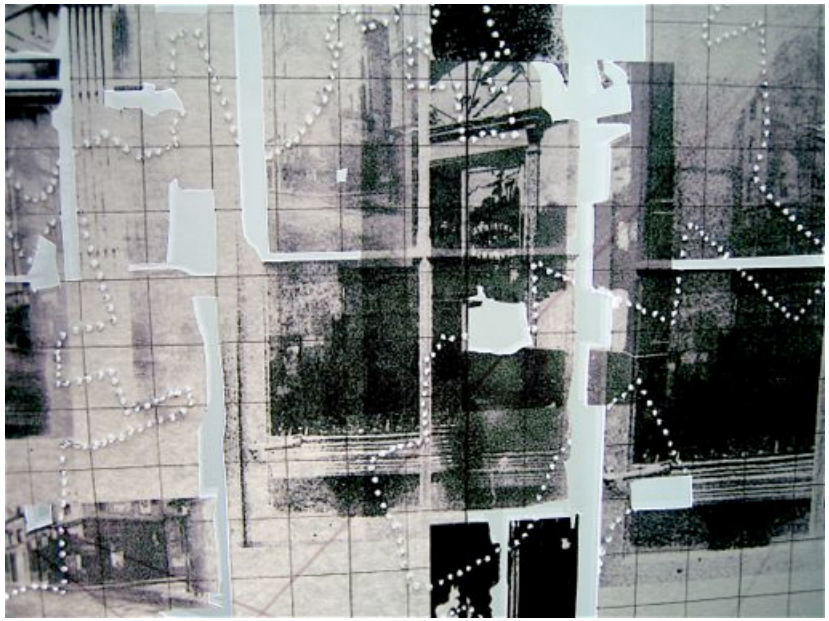


Plate 21: *The View From Here Exhibition: Double–Sided Map, Paris 1931*, wooden frame, glass, easel, paper, photocopies, photoshop, pencil, ink, red stickers, cut outs, light, 2009.



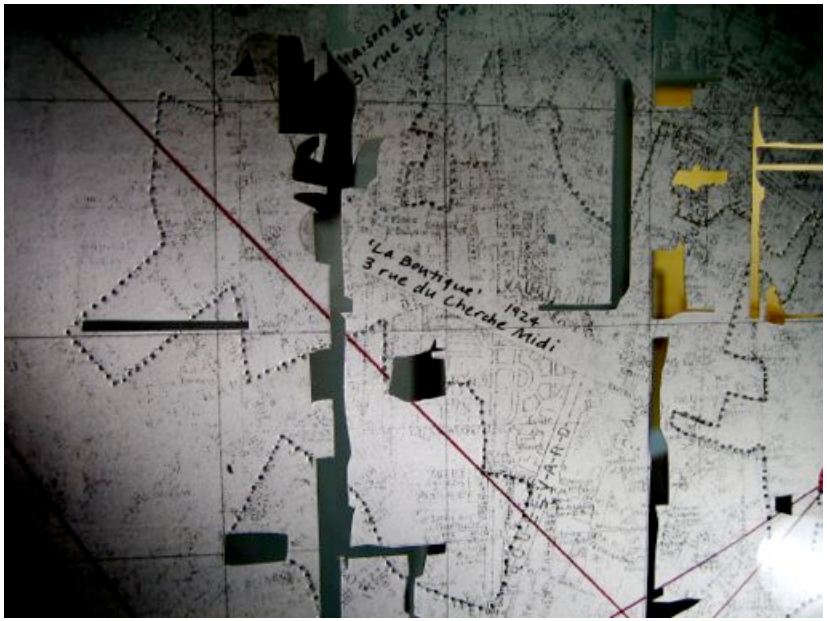


Plate 22: Archive of screen drawings and early works,
various media on different papers compiled in book, 2009.

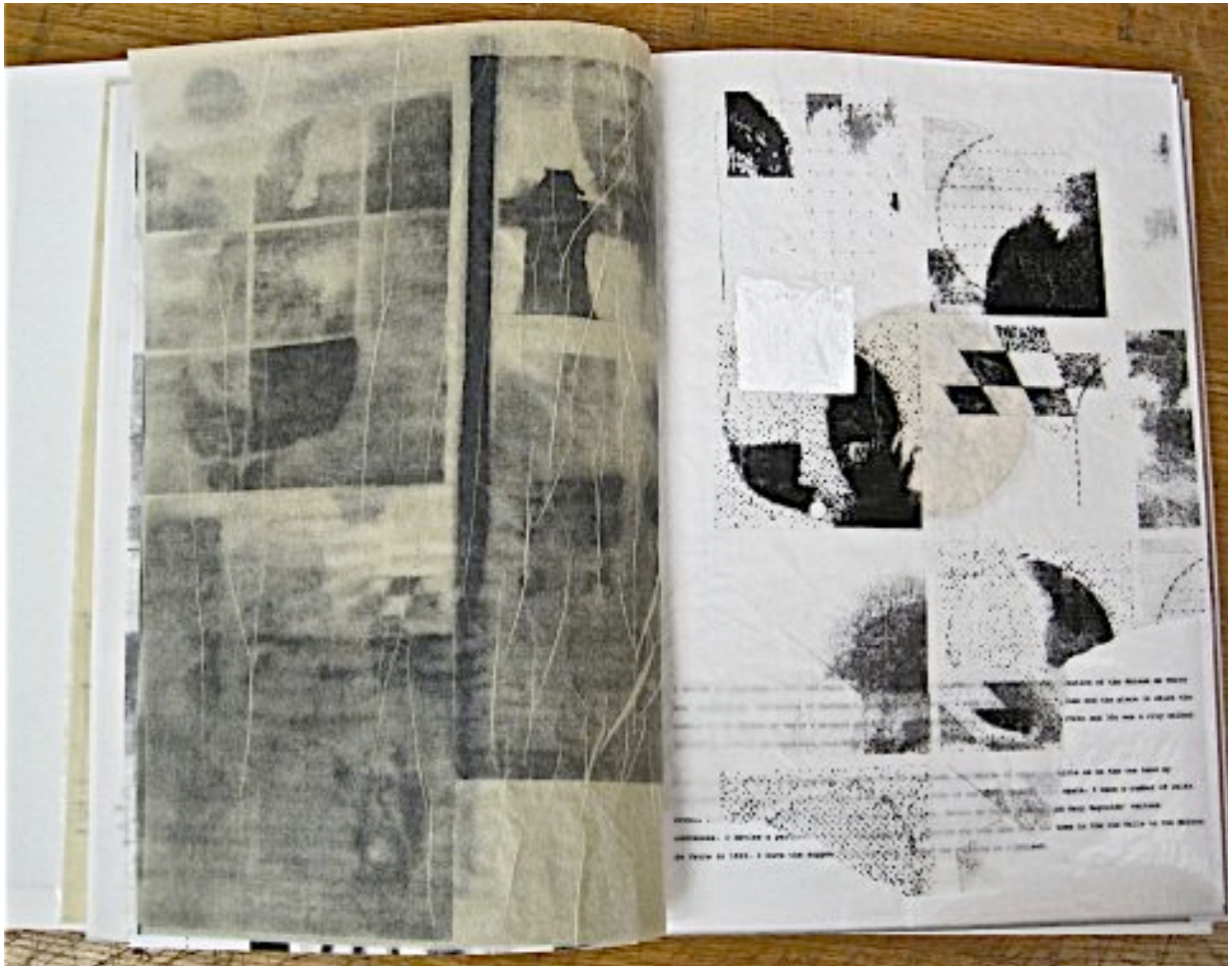
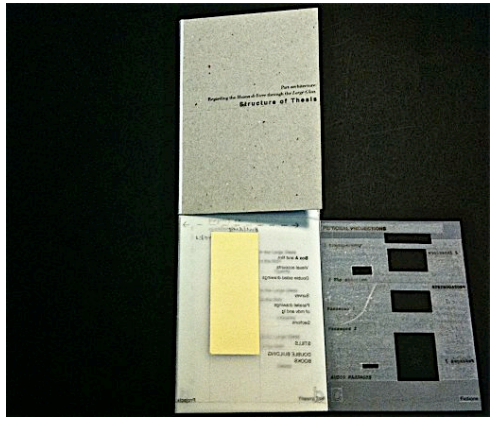
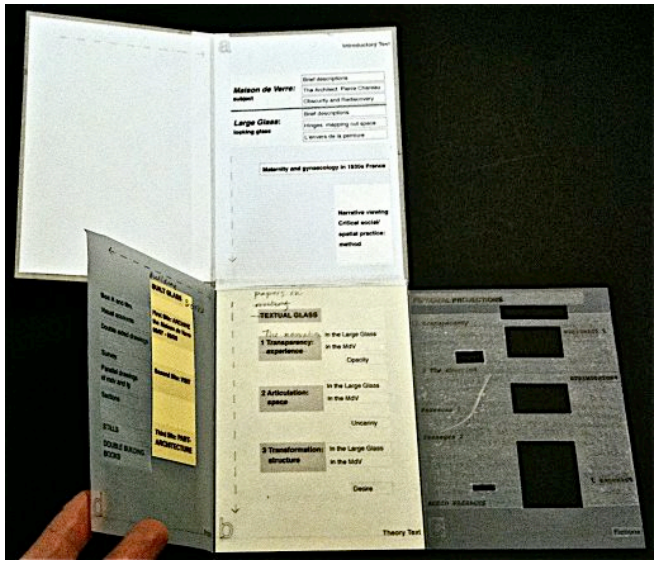
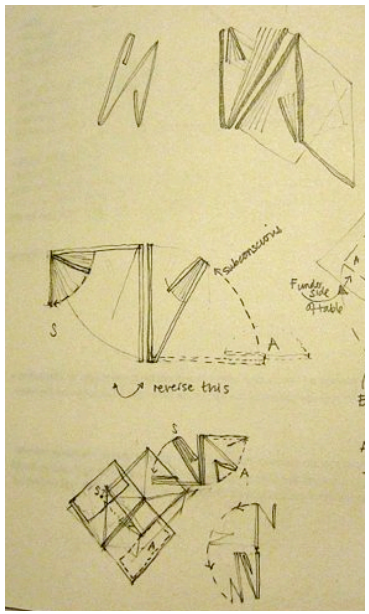


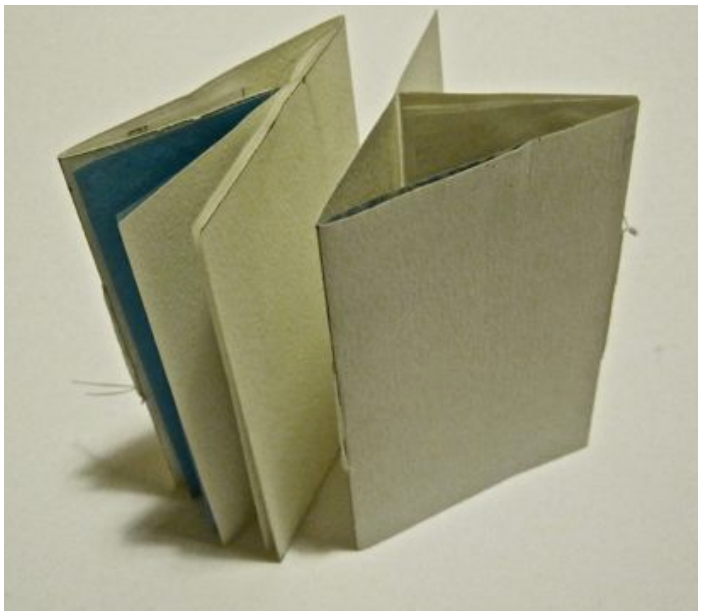
Plate 23: Collage of Parisian streets, 2009.

Plate 24: Experimental folded plans of thesis, 2009.









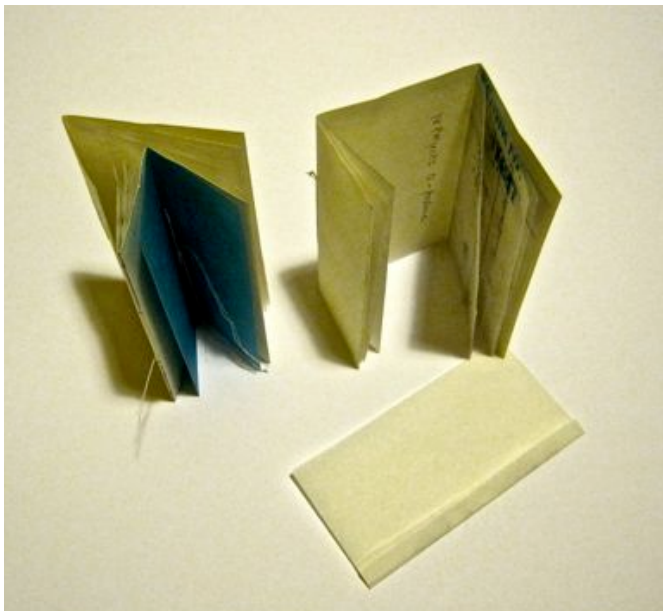
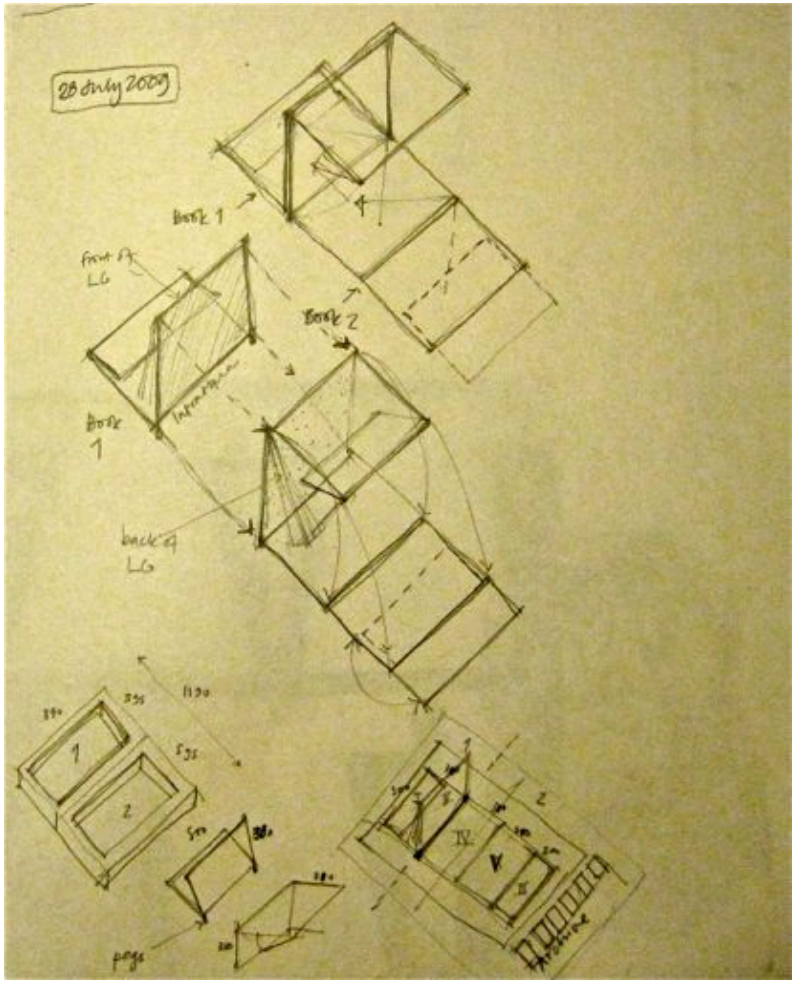
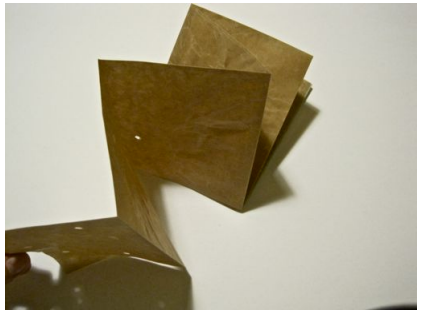
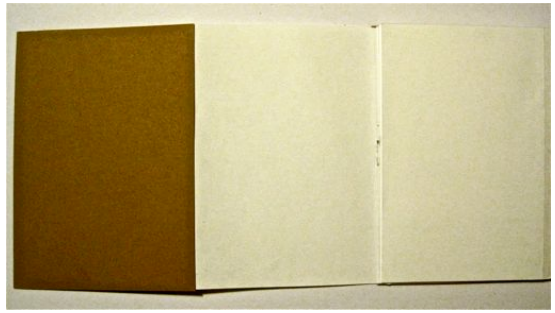
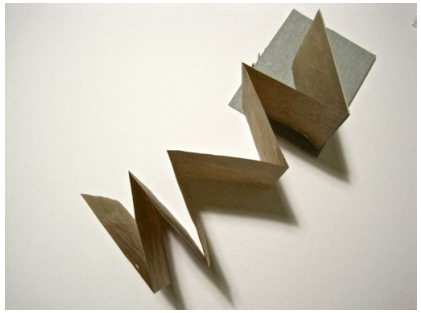


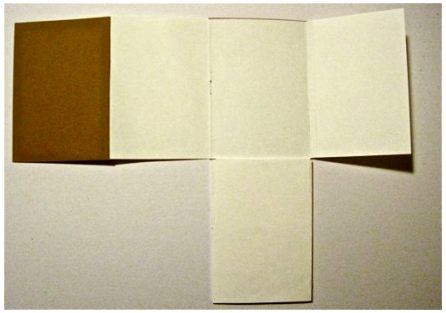
Plate 25: Folded book forms of thesis, 2009.











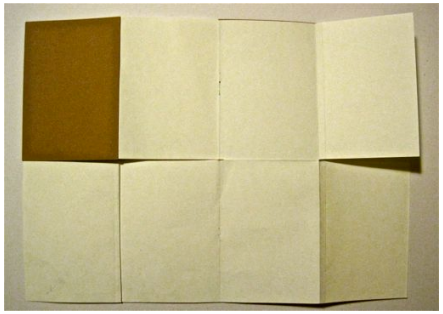
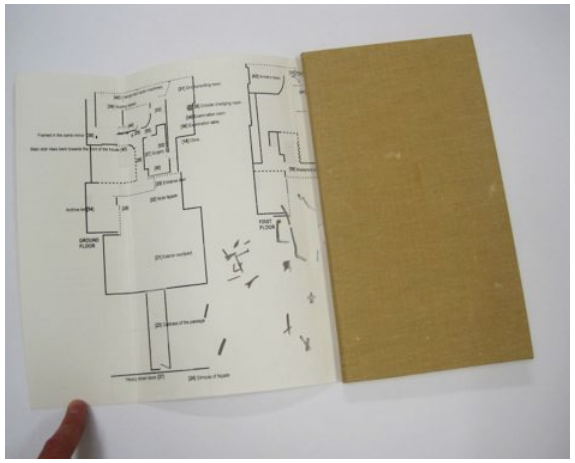
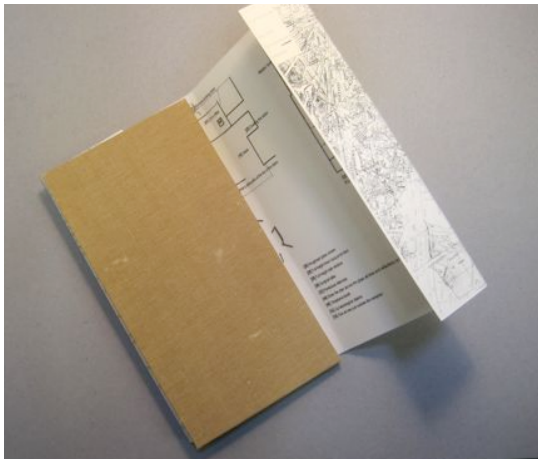
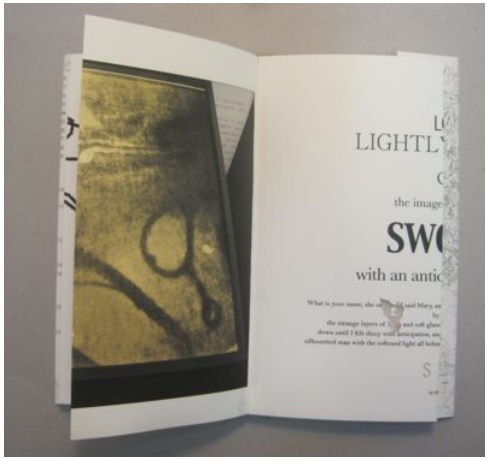


Plate 26: Folded book of box, 2009.

Plate 27: Artist book experiments, 2011.







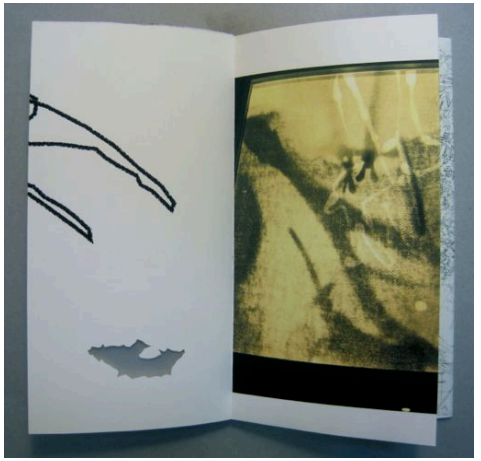
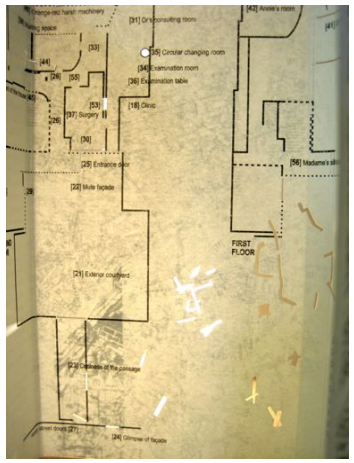
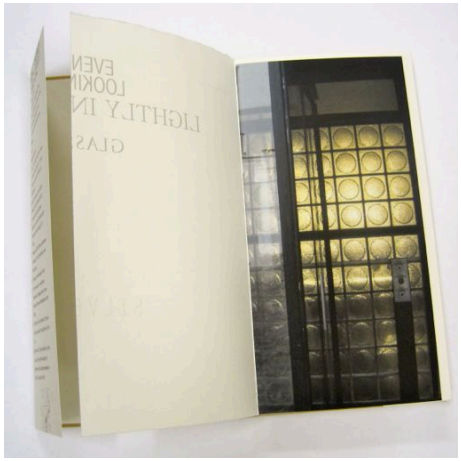


Plate 28: Artist book experiments, 2011.





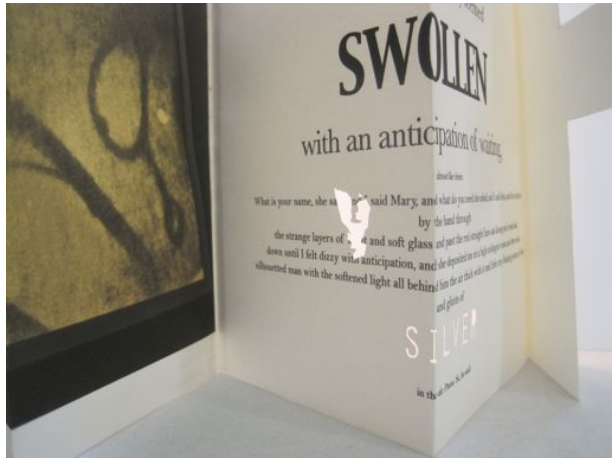
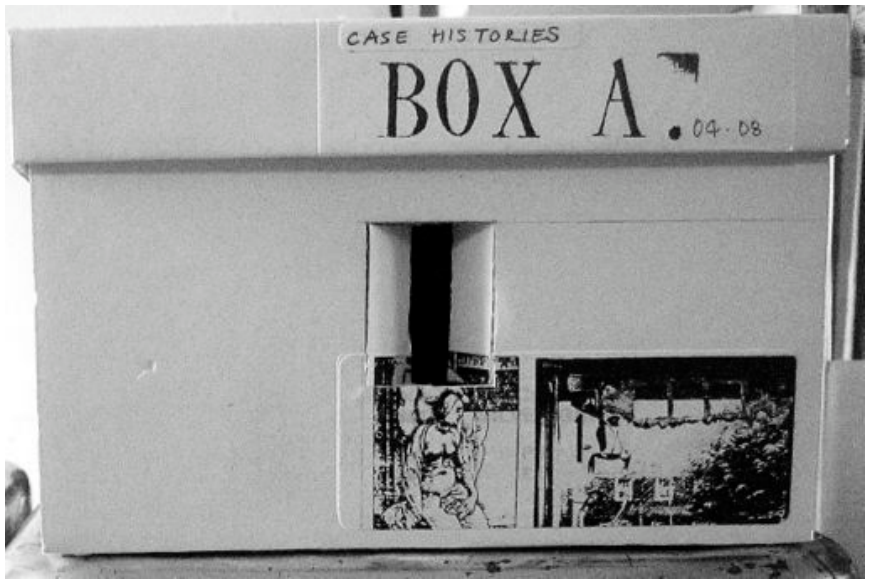
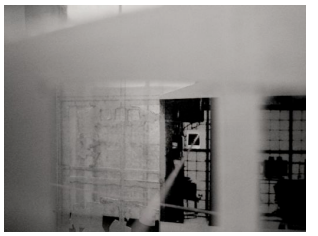


Plate 29: *Box A*, Cardboard box, photocopies, card, paper, string, plaster, 2009.





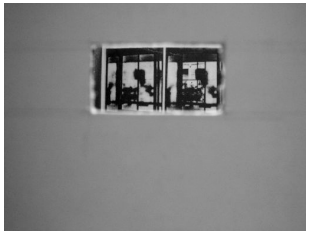
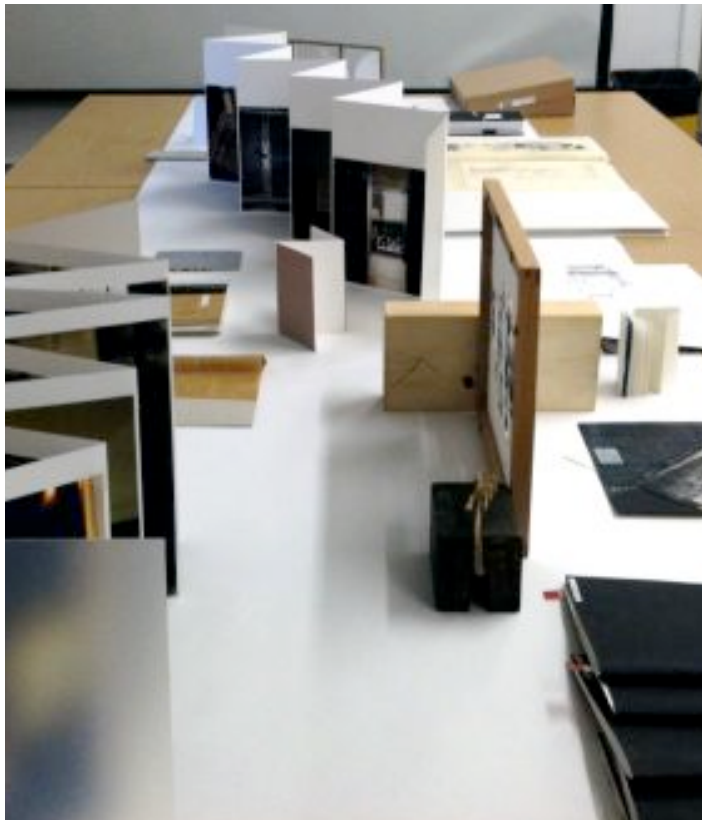


Plate 30: Upgrade archive, 2009.



PART III

4 Glass

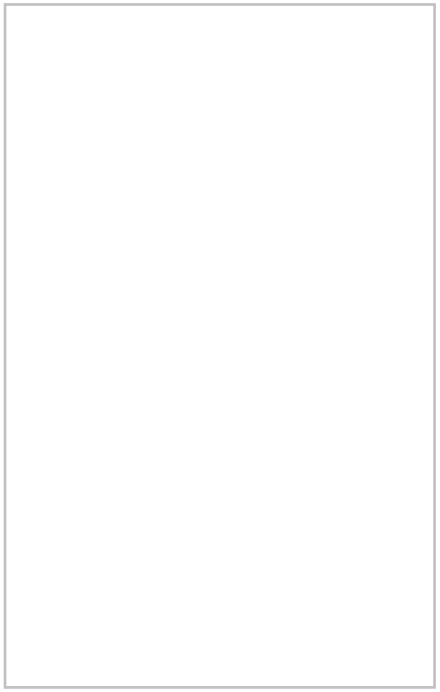


Figure 4.1: Eugene Atget, (**top**) *Corsets*, Boulevard de Strasbourg, c. 1905 and (**bottom**) *Shop Dummies*, Avenue des Gobelins, 1925.

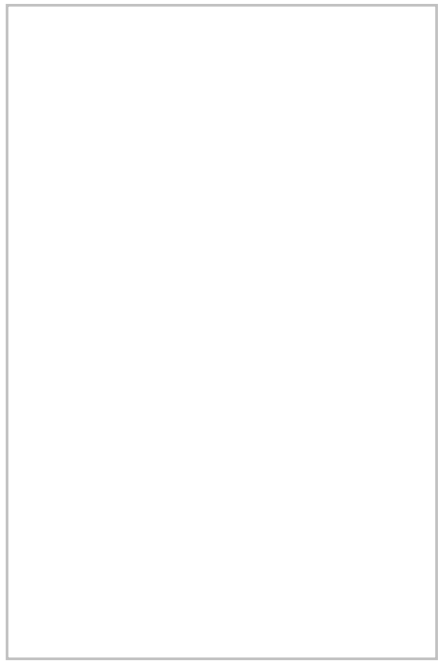


Figure 4.2: Marcel Duchamp, *Large Glass*, or *La Mariée mise à nu par ses célibitaires, même*, (*The Bride Stripped Bare by her Bachelors, Even*), 1915–23. Philadelphia Museum of Art. Photographer unknown, circa 1958 at Katherine Dreier's house, Connecticut.

Glass epitomises the early twentieth century ambition for openness and clarity in architecture and art. It encapsulates or signifies looking. The immediate identifiable material of the *Maison de Verre* and the *Large Glass*, it is the medium to their compositions, and the intervening substance through which they are experienced [figure 4.2]. As such, it has become their motif, in the sense that Walter Benjamin saw the motif as a material signifier of social history.[1]

The first part of this chapter, 'Glass and Modernity', establishes glass as a sign of modernity. Architectural glass was developed towards the large transparent sheets essential to modernist architecture. In this context, I outline the specific types of glass – transparent plate and pressed translucent – in the *Large Glass* and the *Maison de Verre*.

The second part of the chapter, 'Transparency' argues that putting something behind transparent glass renders it to be looked at and thus desirable. The shop window is thus emblematic of early capitalism. Duchamp presented the *Large Glass* as a shop window with a collection of objects separated from each other behind the smooth surface, and through which he explored ideas on bourgeois sexual expectations. I survey his arrangements in dialogue with the parts and objects of the *Maison de Verre* seen through or against its glass. These indicate a changing female sexuality fifteen years later.

The third part, 'Translucency', challenges the objectifying survey of 'Transparency' by demonstrating that something more ambiguous occurs behind the uniform surface of glass. The *Large Glass* has a metaphoric translucency. As if a photographic plate in the *process* of forming its images, we are not sure what

[1] Esther Leslie describes Benjamin's process of montaging motifs together as 'a form of rescue and resuscitation', see Esther Leslie, *Walter Benjamin* (London: Reaktion Books, 2007), 62.

we are seeing.[2] The *Maison de Verre*'s glass is predominantly translucent. With few framed transparent 'windows', its glass veils and organises its interior activities. I here re-describe the building through a series of partly drawn partly fictional narratives which follow different inhabitants' movements through it. An ambiguous written architecture emerges which remodels the historical tensions, contradictions and potential eroticism between home and medicine, building and body.

[2] See Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977), 77.

Glass' quality of being present and absent at the same time – a physical yet transparent barrier – was of vital importance to modernist architects seeking to change the relationship between the envelope and the structure of the building. By the early 1920s, large pieces of glass, installed as canopy, rooflight, screen or window, were an established sign of modernity in public urban architecture. Architectural theorists like Sigfried Giedeon commended large glazed openings which opened up buildings to allow air to flow in.[3] Yet in 1927, when the *Maison de Verre* was first conceived of, this use was unexploited in domestic architecture. The potential of glass was confined to whimsical or exhibitory contexts, for example, Paul Scheerbart's propositions or Bruno Taut and Le Corbusier's pavilions [figure 4.8].[4] Just as it had been in the *Large Glass* a decade earlier, the use of glass in the *Maison de Verre*, then, was radical – it fundamentally altered its domestic spatial outcomes.

Outlining a history of architectural glass is to trace its quest for transparency. Early glass was a 'soft' opaque material due to its low sand content and remained so for centuries.[5] Techniques developed substantially in the fifteenth

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[3] For a particularly clear explication of the expectations of glass in the modern era see Sigfried Giedion, *Building in France, Building in Iron, Building in Ferro-Concrete* [1928], (trans.) J. Duncan Berry (Santa Monica: Getty Publications, 1995), 90, 169.

[4] See Paul Scheerbart, *Glass Architecture* (*Glasarchitektur* [1914]) (London: November Books, 1972); the *Palais Lumineux* and Le Corbusier's *Esprit Nouveau* for the 1900 for the 1925 Expositions in Paris; Bruno Taut's Glass Pavilion at the 1914 Cologne Werkbund: all of which were non functioning temporary buildings, fictions or *folies.*

[5] Useful overviews on glass are Joseph S. Amstock, *Handbook of Glass in Construction* (McGraw-Hill, 1997), 11–38; and John Gloag, *The Place of Glass in Building* (London: G. Allen & Unwin, 1948).

century in London, yet even into the seventeenth and eighteenth centuries the availability of flat sheets of glass for windows was limited. Instead, small pieces of 'crown' glass were made by taking a blob of glass on the end of a stick and rotating it quickly until a larger flatter piece was achieved. As Joseph Amstock describes, 'Such glass had a dimple in its centre, many air bubbles, and a pattern of concentric circles.'[6] It had some transparency, but was coloured, full of impurities, bubbles and ripples. Warps made it hard to use and install. Until the eighteenth century, architectural openings were hence mostly unglazed shutters or 'wind eyes'.[7] More eminent buildings incorporated small pieces of roughcast glass for impermeability rather than view.

The twentieth century ideal of 'pure' glass – a flat, transparent, colourless material – first emerged in the Enlightenment. In 1688 French glaziers discovered that grinding and polishing glass produced a completely clear surface: 'polished plate'. Its use remained limited to small pieces in estimable private buildings. The practice of using oiled paper rather than glass was still common.[8] The desire for polished plate grew through the 1800s, alongside the development of technologies which enabled the production of larger pieces and wider uses. In Paris, larger pieces appeared in public contexts in the roofed iron structured *passages* (arcades) of the 1820s–1850s, followed by the glazed *grands magasins* (department stores) [figures 4.3, 4.15]. In the Parisian Great Exhibitions of 1900 and 1925, glass predominated.[9]

Figure 4.3: *Passage de l'Opéra*, 1822. Favourite haunt of Louis Aragon, [*Le Paysan de Paris*]. Demolished in 1925 to make way for final part of Boulevard Haussmann. Photographer unknown, circa 1909.

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[6] Amstock, *Handbook of Glass in Construction* (1997), 15.

[7] Amstock, *Handbook of Glass in Construction* (1997), 15.

[8] Sabine Melchior-Bonnet, *The Mirror: A History*, (trans.) Katherine H. Jewett (London: Routledge, 2001), 14.

[9] I return to glass in these contexts in 'Transparency' following.

Mirror developed concurrently to glass, aspiring for the perfect reflection. The Romans are thought to have applied hot lead to glass, but most early mirrors were made from thin pieces of polished bronze or silver or speculum metal – two-thirds copper and one-third highly polishable tin.[10] Early glass mirror of the fifteenth century, called 'a glass' or looking glass, was coated on the back with lead, or, by the seventeenth century, a tin mercury amalgam, an idea promoted by Isaac Newton in the 1660s who had seen it done in the Murano in Venice. The process of silvering glass (*tain*) was developed throughout the seventeenth century but resulted in a 'fragile layer of silver, susceptible to humidity and hardly durable', and the use of mercury to adhere it emitted noxious vapours.[11] Modern silvering is credited to an English maker called Drayton, who perfected silvering without mercury in 1858.[12]

In the early twentieth century glass mechanisation processes progressed, not only improving glass' quality, but increasing its size. In 1914, the French *Fourcault* method enabled long sheets of glass to be drawn from a tank of molten glass, and at the end of the First World War Emil Bicheroux pioneered a pouring process resulting in sheets of glass with a more even thickness.[13] In America, new machinery enabled the continuous draw of flat sheets from huge tanks of molten glass. Accompanied by mechanistic methods for easier and more economical grinding and polishing, these processes saw the mass production of large pieces of clear sheet glass.

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[10] Melchior-Bonnet, *The Mirror* (2001), 11–14.

[11] Melchior-Bonnet, *The Mirror* (2001), 62.

[12] See Melchior-Bonnet, *The Mirror* (2001), 64; also see Mark Pendergrast, *Mirror, Mirror: A History Of The Human Love Affair With Reflection* (Cambridge: Basic Books, 2003).

[13] See Christian Schittich, *Glass Construction Manual* (Birkhäuser, 2007), 12.

In this context, the *Maison de Verre* and the *Large Glass* use specific kinds of glass, *glace sans tain* (plate glass) and *verre pressé* (pressed glass), which I explore in the next two sections. Having introduced these materials, I go on in the next parts to expand on their theoretical implications.

Glace sans tain

Having completed various studies in Paris, including *Glissiere contenant un moulin a eau en metaux voisins*, 1913–15 and *Neuf moules mâlics*, 1914–1915 [figure 2.4] which use glass as a substrate, Duchamp acquired the glass for the *Large Glass* in New York in 1915. He described 'two large pieces of plate glass', to be placed 'above one another'.[14] The scale of the artwork was comparable to a commercial sized window. Indeed, to obtain such large sheets of glass, Duchamp probably would have had to approach the New York shop fitting trade. Duchamp's ambition was architectural in scale – he had built a huge transparent window in line with modernist ideals [figure 4.4].[15]

Neither the specification nor acquisition of the glass used in the *Large Glass* is documented. In a note from 1913 Duchamp says, 'Paint final picture on plate glass (thick). (to be seen through / the glass)'.[16] It is difficult to further ascertain its original thickness as Duchamp's notes are unclear and the final object

[14] Cited in Anne d'Harnoncourt and Kynaston McShine (eds.), *Marcel Duchamp* (Munich: Prestel, 1989), 296. Paul B. Franklin, 'The Travels of the *Large Glass*', in *Étant donné no 9* (Paris: Association pour l'Étude de Marcel Duchamp, 2009), 214.

[15] This concurs with Frederick Kiesler's ideas, see Frederick Kiesler, 'Design – Correlation: Marcel Duchamp's "Big Glass"', in *The Architectural Record*, 81/5 (May 1937), 53–60.

[16] Marcel Duchamp, *Marcel Duchamp, Notes* (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980), unpaginated, Note 80. [In French 'on plate glass (thick)' is written 'sur glace sans tain (épaisse)'. This can also be translated as 'on two way mirror' (without silvering)'.]

Figure 4.4: Marcel Duchamp, *Large Glass, or La Mariée mise à nu par ses célibitaires, même,* New York, 1915–23. Philadelphia Museum of Art. Photograph Emma Cheatle, 2010.

frames the cross-sectional edges. Sheet glass was much cheaper than plate. Graded by weight for its ability to withstand wind pressure or shock, I have calculated, using manuals of the time, that the recommended thickness for Duchamp's panes would have been between approximately 1/8" and 5/32" (3.175mm and 4mm).[17] These thicknesses seem unlikely to have been strong enough at this scale to have been worked on, supported and moved around as they were. Plate glass, though processes were relatively new, was just commercially available to the building industry.[18] Its price – it cost about three times more than sheet – reflected the improved qualities to its appearance.[19] Used for large shop windows, the standard thickness of polished plate, three times as strong as sheet,[20] was 1/4" (6mm). Whatever the type, the scale of the *Large Glass* meant the panes shattered extensively in a neat mirror image pattern during its transportation in 1926.[21] Discovered broken in 1931, Duchamp's repaired it in 1936 by sandwiching each pane between two new sheets, finally obscuring the nature of the originals. My study of the repaired *Large Glass* in the Philadelphia Museum in 2010 suggests the new pieces might be 6mm. Three pieces measuring 6mm were placed on

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[17] Frank Eugene Kidder, *The Architects' and Builders' Handbook: Data for Architects, Structural Engineers, Builders and Draughtmen* (New York: John Wiley & Sons, 1921), 1574; John Gloag, *The Place of Glass in Building* (London: Allen & Unwin, 1948), 33. Weight was balanced with overall size to give a recommended thickness.

[18] See Quentin R. Skrabec, *Michael Owens and the Glass Industry* (Gretna: Pelican Publishing, 2007), 253–262. Skrabec states that 'it was not until May 1915 that Toledo Glass shipped usable, high-quality product. Eight thousand boxes of window glass were shipped to Smith & Wyman Sash & Door.' See pages 257, 262.

[19] Kidder, *The Architects' and Builders' Handbook* (1921), 1577.

[20] Gloag, *The Place of Glass in Building* (1948), 25.

[21] On the breakage see Calvin Tomkins, *Duchamp: A Biography* (London: Chatto and Windus, 1997), 12. I will return to this in the chapter, 'Air'.

edge, perpendicular to the vertical plane, as a transom between the upper and lower planes, replacing newspaper in the original [figure 4.5].[22]

Duchamp states that, 'the "Glass" saved [him], by virtue of its transparency.'[23] He used glass as a replacement for the canvas, allowing a new way of thinking about the picture plane. He said: 'These things are often technical. As a ground, the glass interested me a lot. Then, color, which when put on glass, is visible from the other side, and loses its chance to oxidise if you enclose it […] constitutes technical matters which had their importance.'[24]

Duchamp set up the two glass panels horizontally in his studio, and worked from above on the back surface [figure 4.6].[25] He tackled the upper female panel first. After a visit to his studio, Beatrice Wood and Henri Pierre Roché wrote: 'Very large plates of glass were resting on trestles. Parts of them were covered with metal forms that had been cut and painted slightly then attached to the glass with transparent varnish.'[26] Often called a 'painting on glass', according to Wood and Roché, the paint was applied to the lead sheets before it was sealed

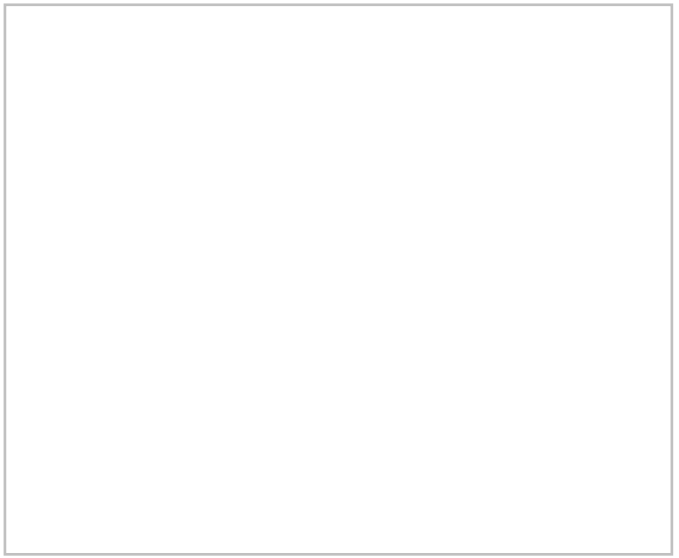

Figure 4.5: Marcel Duchamp, *Large Glass, or La Mariée mise à nu par ses célibitaires, même,* New York, 1915–23. Philadelphia Museum of Art. Detail of glass strips on edge from the front (**left**) and behind (**right**). Photograph Emma Cheatle, 2010.

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[22] Katherine Dreier who financed the repairs paid a total of '$745.30 (equivalent today to over $11,500). See Franklin, 'The Travels of the *Large Glass*' (2009), 224.

[23] Pierre Cabanne, *Dialogues with Marcel Duchamp* [1971], (trans.) Ron Padgett (New York: Viking Press, 1987), 18.

[24] Cabanne, *Dialogues with Marcel Duchamp* (1987), 38.

[25] Tomkins, *Duchamp* (1997), 155. This would eventually be what was seen from behind.

[26] Henri-Pierre Roché, *Victor (Marcel Duchamp): roman* (Paris: Centre National d'Art et de Culture Georges Pompidou, 1977), 65, my translation. They continue: 'Certaines parties étaient nettes. D'autres revêtues de couches, de poussière d'epaisseurs variées. Une pancarte disait: Élevages de poussière. A respecter.' [Certain parts were clear. Others were coated with layers of dust to various thicknesses. A sign said: Dust Breeding. To be respected.]

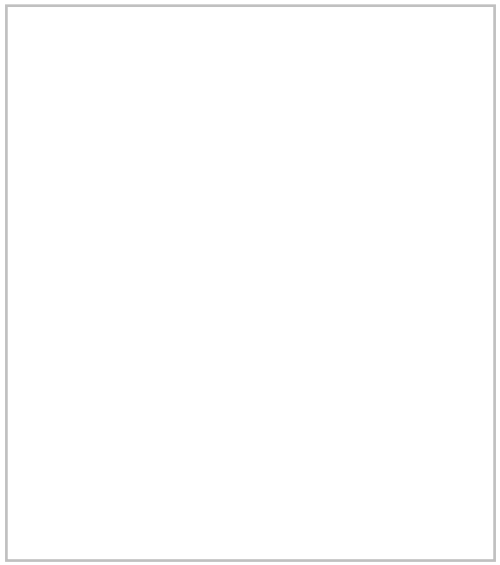

Figure 4.6: Marcel Duchamp, *Large Glass, or La Mariée mise à nu par ses célibitaires, même,* New York, 1915–23. Philadelphia Museum of Art. Detail of back of glass. Photograph Emma Cheatle, 2010.

to the glass. A strange process, more akin to the artisanal processes of a stained glass window maker than a painter, the work progressed slowly.[27] Elements were painstakingly composed onto the brittle ground from an array of materials as though being tested in a laboratory.

The experiment lasted eight years. When the pieces of glass were framed and erected into the vertical they became a large plane, a mediation between the artist and the world.[28] To Katherine Dreier this plane represented 'a glass partition to separate a passage from a room'.[29] To me it is a freestanding window, which implies the rest of a façade, and the spaces inside and out – to spectate from and look through to. It appears without walls or room, apart from those of the gallery, an installation free from but suggestive of the surrounding building. The materials applied to the glass were transformed into a collection of objects, behind rather than on the glass. Duchamp thought of each object as an 'illuminant'.[30] He had set up a window onto something: a frame in time depicting both space, and a story. The viewer reflected on the glass surface became incorporated as one of its objects. If, as Rosalind Krauss has suggested, it is the artist's self portrait, it is, by virtue of glass' reflectivity, also the viewer's portrait, each of us implicated on the surface, involved in the story, an inhabitant projected from the implied room around it.

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[27] This idea concurs with Kiesler again, Kiesler, 'Design – Correlation' (1937), 53–60.

[28] The original was a 'thick wooden frame', Jean Suquet, 'Possible', (trans.) Tamara Blanken, Thierry de Duve and Dennis Young, in Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993), 89.

[29] *Art News*, vol. 25, no. 32 (14 May 1927): section 1, non paginated.

[30] Marcel Duchamp, 'À l'infinitif', (trans) Cleve Gray, in Michael Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973), 86.

Verre pressé

> 'se trouve l'écran-façade de la Maison de Verre, gris et noir, brilliant et translucide, debout comme un morceau extrait d'un bâtiment titanesque'[31]

Working in Paris ten years later, when sheet glass had became readily available, Chareau rejected the use of it – its transparency and ventilatory capacity. Instead, he utilised thick translucent pavement lights as a vertical skin to the *Maison de Verre* [figure 4.7].

Although the building employs glass variously throughout, it is known for its extensive use of the pressed structural glass lens on the front and rear façades. The lasting impression of the building is the homogeneous screen created from these lenses. Unlike plate glass, the glass lens was not developed with the urge for transparency. In the nineteenth century, structural pieces of glass, framed with metal, had been developed for pavement lights to enable light to reach basement areas. Called *Pavé 'Securex'*, part of *le béton translucide,* these glass and concrete forms of construction were seen particularly in the pavements to Parisian department stores of the mid-nineteenth century.[32] The 'Nevada' glass lens developed from these horizontal types. Its substantial use at the *Maison de Verre,* I argue, led to its subsequent accepted use in vertical walling of modern buildings.

Figure 4.7: Pierre Chareau, *Maison de Verre,* Paris, 1928–32.

[31] 'the screen-frontage of the Maison de Verre, gray and black, brilliant and translucent, standing vertical like a chunk taken from a huge building', Fernando Montes, 'Maison Dalsace', in *GA Houses,* 46 (Tokyo: A.D.A. Edita, 1977), unpaginated. My translation.

[32] Paul Amédée Planat, E. Rümler (eds.), *La Construction moderne vol. 54* (Impr. F. Levé, 1938), ii, xvi, xxxviii. Émile Zola writes of the 'pale light from the basement windows', Émile Zola, *Ladies' Delight* (*Au bonheur des dames* [1883]), (trans.) April Fitzlyon (One World Classics, 2008), 329.

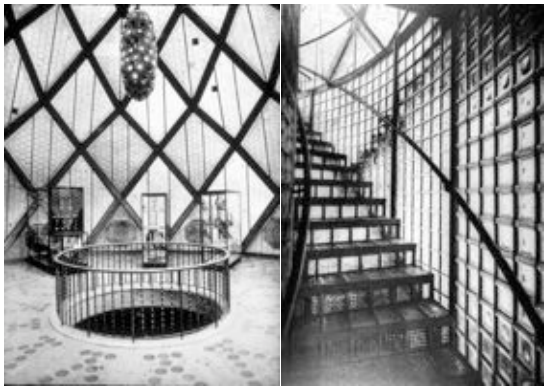

Figure 4.8: Bruno Taut, *Glass Pavilion,* Deutscher Werkbund, Cologne, 1914. Photographer unknown.

Although 'prismatic glass tiles' were used on the exterior to Bruno Taut's 1914 temporary Glass Pavilion for the Cologne *Deutscher Werkbund*, architecture constructed solely from glass was primarily auxiliary.[33] Taut inserted his lensed areas as small panels into a concrete building [figure 4.8]. A year after the *Maison de Verre* was complete, 'Nevada' lenses appeared in small panels, like Taut's, in the concrete framed façades of Le Corbusier's *Immeuble à la Porte Molitor* and the *Cité de Refuge*, both 1929–1933. The 1937 publication *Glass in Architecture*, an extensive analysis of 1920s and 30s glass architecture, attributes Le Corbusier as pioneering their use.[34] The text suggests that 'Pierre Chareau's house for a doctor in Paris is so far the most courageous experiment in the domestic application of the glass wall', yet does not mention the extensive use of 'Nevada' lenses.[35] Pierre Chareau's use of the lenses in great planes precedes that of others and, as the first use as an extensive skin for a fully functioning, domestic building, is more notable and bold.

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[33] Frederick Kiesler, *Contemporary Art Applied to the Store and its Display* (London: Sir Isaac Pitman and Sons, 1930), 38. Kenneth Frampton makes a brief association of the *Maison de Verre* with Taut, see Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 77.

[34] Raymond McGrath and A.C. Frost, *Glass in Architecture and Decoration* (London: The Architectural Press: 1937), 159–160, 199.

[35] McGrath and Frost, *Glass in Architecture and Decoration*, 152. Deborah Gans, *The Le Corbusier Guide* (Princeton: Princeton Architectural Press, 2006), 61, though, attributes the 'Maison de Verre [as] the most likely source of the design' for *Porte Molitor*. The apocryphal story is that Le Corbusier was seen on occasion at twilight making sketches of the building. Stanislaus Von Moos writes 'While the Maison de Verre was nearing completion, Madame Dalsace's maid observed a man in a black coat and derby hat making sketches on the building site in the evenings, and one evening Madame Dalsace identified the secret visitor as Le Corbusier. The house was finished shortly before Le Corbusier's Clarté flats in Geneva, whereas the Cité de Refuge and the apartments at the Porte Molitor were still under construction at the time.' Stanislaus Von Moos, *Le Corbusier: Elements of a Synthesis* (London: MIT Press, 1979), 114.

The upper part of the façade of the *Maison de Verre* reads as a two storey screen, approximately 5 metres high, a soft vertical homogeneous glass sheath presented to the courtyard [figure 4.7]. The 'Nevada' lenses sit four wide and six high in a black steel stanchioned grid to make a self supporting vertical plane. Concrete was used originally as a visible mortar bedding over the steel framing – as can still be seen at the rear façade with its soft glass and concrete appearance [figure 4.9]. The façades were highly experimental and the manufacturer, Saint Gobain, would not guarantee them as structural or weatherproof.[36] Indeed by the 1950s, the front was cracking under its own weight. The mortar was removed and the lenses replaced with new mass produced ones giving a much more sterile white and uniform light, with additional steel plates between. In my readings I interpret the façade as the original, softened by the concrete mortar.

Although together the lenses seem a continuous skin, each is an individually pressed glass object about 38mm thick and 200mm square [figure 4.10]. It has a greenish hue suggesting that it is made from glass with substantial iron oxide impurities. The original manufacture process dropped a 'charge' of molten glass into the 'body' of a steel mould with an internal pattern. A 'plunger' was then pressed down into the body to complete the shaping of the molten glass. Whether this was done by hand or pressed by machine is unclear, both methods were used at the time. Once pressed, the glass was removed from the mould and allowed to cool slowly, anneal and strengthen. Each lens would be carefully checked for faults arising from cooling too quickly or an incorrect mould temperature, then ground by machine, creating a polished interior concave surface.

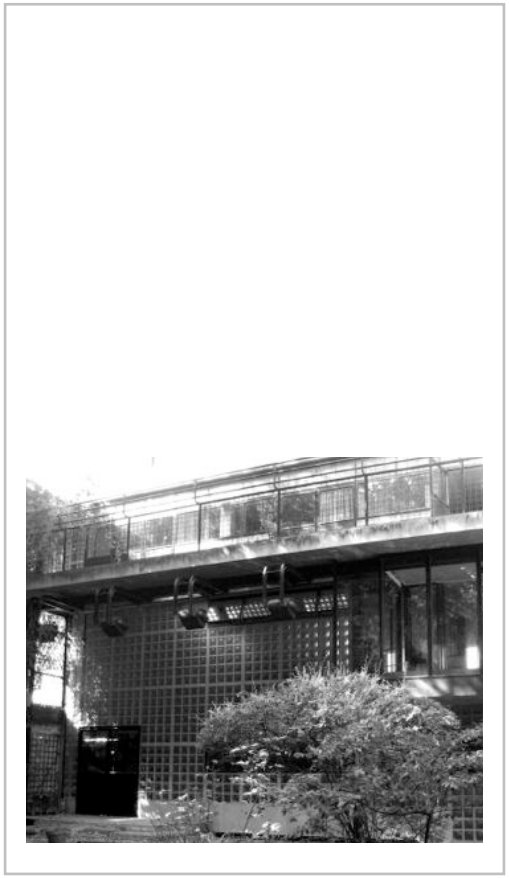

Figure 4.9: Pierre Chareau, *Maison de Verre*, Paris, 1928–32. (**top**) Front with original mortar, photograph René Herbst, 1950. (**bottom**) Rear, photograph Emma Cheatle, 2009.

[36] 'Saint Gobain en 1930 réfusera de garantir l'application faite par Chareau … et ce malgré que l'enterprise Dindeleux chargeé de la réalisation, soit parmi les premières spécialistes en la matière.' See Montes, 'Maison Dalsace', in *GA Houses,* 46 (1977), unpaginated.

Chareau initially speculated on other kinds of glass for the façades at the *Maison de Verre*: sheets of transparent or *dépoli* (frosted) glass.[37] When he proposed the lenses the municipal building authorities questioned their ability to adequately provide climate control and ventilation.[38] Although described as 'extremely beautiful' it was felt they 'did not fully meet the hygienic requirements of a glass wall.'[39] Also offering little sound insulation, their concave interiors were excellent dust collectors.

Chareau possibly followed Paul Scheerbart's ideals, who claimed: 'Our culture is to a certain extent a product of our architecture [and will only change when] we take away the closed character from the rooms in which we live. We can only do that by introducing glass architecture, which lets in light, […] not merely through a few windows, but through every possible wall'.[40] On the finished building Pierre Vago commented in 1933, perhaps somewhat ironically: 'It is indispensable for men of the twentieth century to spend their days, their hours, of leisure and rest in a glass box, among randomly placed columns, with their rivets exposed, in a laboratory open on all sides.'[41] Yet Chareau's use of glass seemed to reflect its more philosophically complex nature – challenging modernist tenets as much as reinforcing them. The glass he incorporated has colour, texture, opac-

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[37] *Glaces et Verres*, no. 17 (août 1930), 19–20.

[38] Interview with Chareau in *Glaces et Verres*, no. 17 (août 1930), 19–20.

[39] McGrath and Frost, *Glass in Architecture and Decoration* (1937), 48–49, 187.

[40] This is Taylor's idea, see Taylor, *Pierre Chareau* (1992), 22. Scheerbart, *Glass Architecture* (1972), 41.

[41] Pierre Vago, Paul Nelson and Julien Lepage, 'Maison de Verre', in *L'Architecture d'Aujourd'hui*, no. 9, Nov/Dec (1933), 4–15. Reproduced in *L'Architecture d'Aujourd'hui*, no. 289, Oct (1993).

ity, thickness, weight, fragility, surface and depth, alongside transparency, reflectivity and translucency. It obscures as much as reveals social values.

This ambiguity of glass resonates with Benjamin's views. With no aura, or past, Benjamin felt glass architecture had potential to bring functional and metaphorical clarity to modern life.[42] Yet he acknowledged that his 'adherence to a modern "progressive" vision of glass architecture' was a fascination mingled with, yet not diminished by, his ongoing doubt. By 1933, increasingly attaching glass to the trajectory of fascism, Benjamin's was a sort of passionate ambivalence.[43] This is illustrated by his possible relationship to the *Maison de Verre.* On April 13, 1934, he was to deliver a lecture at the home of a 'well-known gynecologist', in the salon, followed by a further four individual lectures or seminars over the spring. As Maria Gough states 'The rather well-known gynecologist – whose name, curiously, remains undisclosed in the correspondence – is Jean Dalsace, a committed member of the French left (and later member of the Communist Party) who, in addition to his manifold pioneering contributions to medicine, plays a significant role in Paris in the 1930s in both antifascist and cultural

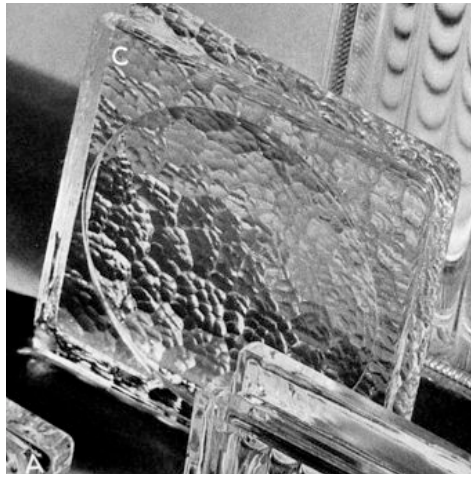

Figure 4.10: 'Nevada' glass lens. Photograph from McGrath and Frost, *Glass in Architecture and Decoration* (1937), 205.

[42] See Walter Benjamin, 'Experience and Poverty' [1933], in Walter Benjamin, *Selected Writings, Volume 2 1927–34*, (trans.) Rodney Livingstone (London: Belknap Press, 1999), 731–6. Pierre Missac argues that for Benjamin glass was not just a metaphor for a functional lifestyle but through its 'image' of transparency it enabled a transparency in style of thought and writing: a writing of history. Pierre Missac, *Walter Benjamin's Passages,* (trans.) Shierry Weber Nicholsen (London: MIT Press, 1995), 148.

[43] Benjamin, 'Experience and Poverty' (1999), 731–6. See also Walter Benjamin, *The Arcades Project,* (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002). As Missac puts it, this ambivalence, for Benjamin, 'put "modernity" into question.' Missac, *Walter Benjamin's Passages* (1995), 154.

affairs.'[44] The lectures' cancellation though, officially due to Dr Dalsace's sudden bout of 'pulmonary inflammation', also seems to coincide with Benjamin's doubt with glass.[45]

The front façade, enclosing the salon in which Benjamin's lectures would have occurred, appears as wall rather than window – an opaque glass wall seemingly hanging from above in the space. At night it is lit, revealing the interior as silhouetted shapes. Close to, it divides into a multitude of individual lenses each an object about the size of a hand. These are not for seeing through though, for, when one looks closer, the image in the lens is blurred and refracted by the thickness of the glass and chiselled pattern on its outer surface. Through local faceted reflections, one's face becomes almost incorporated into the chiselled pocks and fragments of interior.

Most historians focus on this glass to the façade of the building alone rather than its uses throughout the interior. Kenneth Frampton, for example, posits the façade with the function of maintaining purity of light. Diffusing an even light throughout the interior spaces, he suggests it 'simulates a quality of illumination comparable to that experienced in the open air, thus contributing to the experience of the house as a "world within a world", enclosing its own hierarchy of public and private spaces'.[46] Yet beyond the façade the building is an experimental catalogue of glass types and qualities [Plate 31]. There are framed plate win-

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[44] See Maria Gough, 'Paris, Capital of the Soviet Avant-Garde', in *October* 101/Summer 2002, 54–55. Also see Leslie, *Walter Benjamin* (2007), 145. In *Benjamin, Selected Writings Vol. 2, 1927–34* (London: Belknap Press, 1999), 852, the venue of the lectures is described as a 'Parisian art salon'.

[45] Despite being a great archivist, there is no further mention of the *Maison de Verre* in Benjamin's published writings. See Leslie, *Walter Benjamin* (2007), 9.

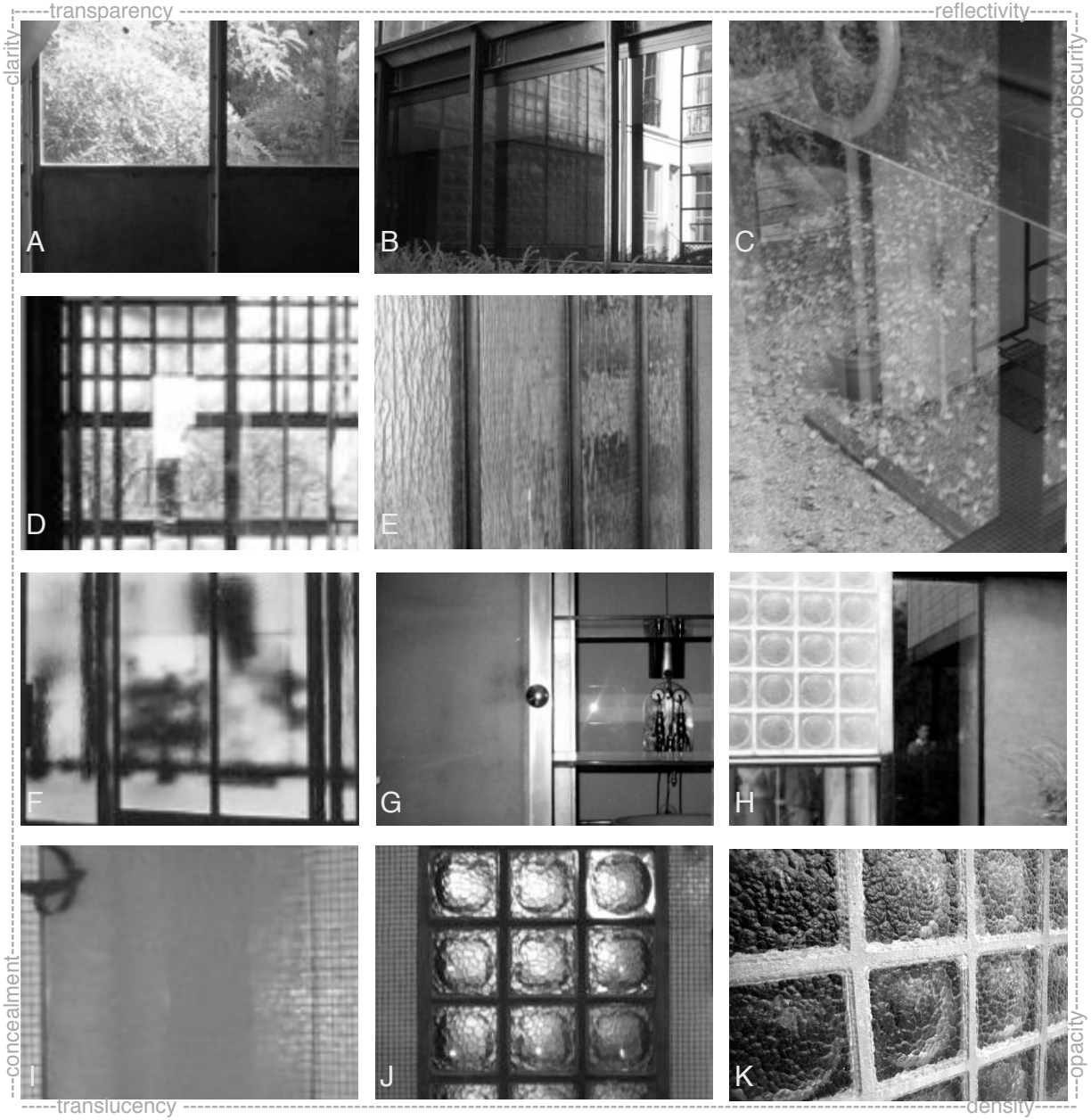
[46] Frampton, 'Maison de Verre', (1966), 259.

dows to the lower parts of the front façade, smaller windows to the rear, reinforced cast glass screens to the interior passage, clear plate glass doors to the clinic reception room, and an obscured stippled plane in the master bathroom. Against the veiling glass of the exterior, the interior is a further series of layers, with little hierarchy between spaces, or exterior and interior. The body is folded into a complex space, commodified and veiled by framing and reflection of the self. Where the *Large Glass* was all window and absence of the surrounding space, the visitor to the *Maison de Verre* is left wondering where wall and window, interior and exterior begin and end.

Plate 31: Cataloguing glass types at the *Maison de Verre*, April 2009.

Different glass types contextually create different qualities.

A: Plate clear / transparent
B: Plate transparent / reflective
C: Plate reflective / obscure
D: Plate + lens clear / concealing
E: Reinforced cast reflective / obscure
F: Reinforced cast obscure
G: Sanded sheet translucent
H: Lens + plate obscure / reflective / opaque
I: Stippled sheet translucent / concealing
J: Lens reflective / dense
K: Lens dense / opaque



'The coming architecture is dominated by the idea of transparency.'[47]

Window

If, as I have argued, glass epitomised openness and clarity and promised to revolutionise domestic settings, in Paris the modern potential of glass was most apparent in its urban appearance. Its utilisation as the large shop window, the *vitrine*[48] – as seen in the nineteenth century *passages* (arcades), *grand magasins* (department stores) and early twentieth century *expositions* (world exhibitions) – was its architectural *raison d'etre*.

The *passages* were narrow routes connecting larger streets to the right bank of the Seine, forming a hidden, internal structure to Paris. The first, the *Passage du Prado*, was installed as early as 1785, the *Passage du Claire* and *Passage du Panoramas* in 1800, and between 1820 and 1845 thirty-four were built with ever more ambitious glass roof structures, matched by huge interior shop windows [figure 4.11].[49] Favourite haunts of the surrealists, Louis Aragon's *Paris Peasant* is a testament to the *Passage du l'Opera* before it was torn down in 1925.[50] Walter Benjamin claimed Aragon's writing seeded his *The Arcades Project*

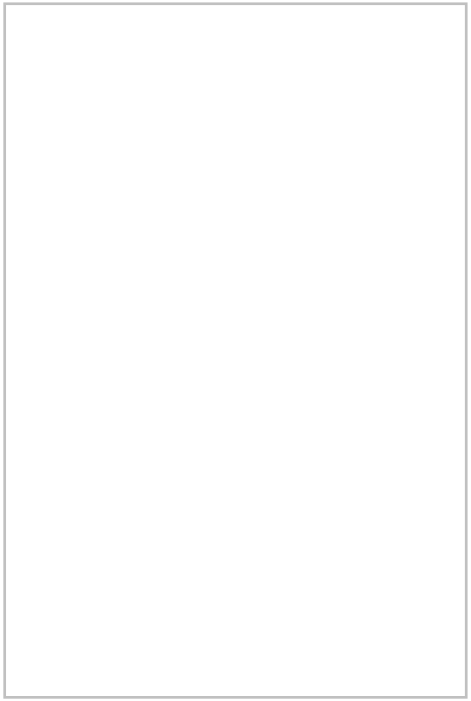


Figure 4.11: (**top**) Seeberger Brothers, *Passage du Jouffroy*, 1926; (**bottom**) Comparison of nineteenth century arcade shape and size. In Paris: A. Passage des Panoramas, 1800; B. Galerie Vivienne, 1825; C. Passage du Grand Cerf, 1825; D. Galerie Colbert, 1826; E. Galerie d'Orléans, 1829. Johann Friedrich Geist, *Arcades: the History of a Building Type* (London: MIT Press, 1983), 100–101, figure 61.

[47] Walter Benjamin, 'The Return of the Flâneur' [1929], in Walter Benjamin, *Selected Writings, Volume 2 1927–34*, (trans.) Rodney Livingstone (London: Belknap Press, 1999), 264.

[48] In French this means both (shop) window and display cabinet

[49] Hussey, *Paris* (2006), 330.

[50] Louis Aragon, *Paris Peasant* (*Le paysan de Paris* [1926]), (trans.) Simon Watson Taylor (Boston: Exact Change, 1994).

Figure 4.12: (**top**) Eugene Atget, *Au Bon Marché,* 1926. V&A Collections. (**bottom**) Brassaï, *Le rêve – Surs les grands boulevards, The Dream – Shop Window on the Boulevards*, Paris, 1934.

which cited the arcades as: '"a recent invention of industrial luxury, are glass-roofed, marble-panelled corridors [with] the most elegant shops, so that the passage is a city, a world in miniature"'; 'temples of commodity capital' and hence 'the origin of department stores?'[51] They were unique public spaces that were internal (warm and dry, contained, one did not need to wear a coat even in winter[52]), exclusive (many never appeared on maps) and safe. They also lead to a further secret and internal world of urbanity: cafés, meeting places, brothels and seedy hotel rooms on upper levels,.

The *grands magasins* of the mid-nineteenth century, for example Gustave Eiffel and L.C. Boileau's *Bon Marché*, 1876, lured the public with their great display windows onto the street [figure 4.12, 4.15].[53] They, and the smaller *boutiques*, both used the largest windows possible to create a space in which the unique object could be presented. The *grand magasin* displayed as many goods as possible to appeal to the common (female) passerby.[54] The aim was to beguile with a public display of objects placed artfully, out of reach, behind glass, towards

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[51] Benjamin, *The Arcades Projec*t (2002), 3, 31 [A1,1], 37 [A2,5].

[52] Benjamin, *The Arcades Projec*t (2002), 38 [A2,8].

[53] Michael B. Miller, *The Bon Marché: Bourgeois Culture and the Department Store 1869–1920* (London: Allen and Unwin, 1981), 53, 71, 169; Zola, *Ladies' Delight* (2008), see especially 3, 5–6, 7, 29, 359, where he charts the rise of the display of goods in the great shop windows of a new department store in the second half of the nineteenth century.

[54] As Keisler states 'the eye of the passerby must be led into the interior of the store and directed as you wish. *She* should see things you consider important for her to see.' Kiesler, *Contemporary Art Applied to the Store and its Display* (1930), 84. My italics. Also see Zola: 'The department store tends to replace the church … in the end all the drama of life with the hereafter of beauty'; 'It was a cathedral of solid and light.' Zola, *Ladies' Delight* (2008), 275. The shop was designed with women in mind: the creation of feminine desire through the masculine desire for the seeing the female in a state of desire. Miller, *The Bon Marché* (1981), 3, 34, 177–78. Women, despite being increasingly in employment elsewhere, made up only a small proportion of the shop's workforce.

the ‘sensuous’ fantasy of private ownership.[55] In this way the shop window could suggest the necessity of new goods for the domestic interior and the body. The boutique concentrated on selectiveness: ‘Gazing at its windows one observes but a small collection of enchanting little objects, exquisite little fripperies’.[56] As noted, Pierre Chareau owned such a boutique from 1924, *La Boutique*, at 3 rue du Cherche-Midi in which his furniture, interior fittings and fabrics were displayed to appeal to wealthy clients. In this shop, adjacent to Jeanne Bucher’s first Parisian gallery displaying avant-garde artists, Chareau exhibited furniture, art and book designs by Rose Adler.[57]

Following Joseph Paxton’s Crystal Palace, 1851, the centrepiece for the British 1851 World Exhibition which included three hundred thousand pieces of structural glass, the Parisian *expositions* of 1900 and 1925 consisted of ever larger glass fantasies. [58] In 1896 sociologist Georg Simmel coined the term ‘the shop-window quality of things’,[59] to explain the *exposition’s* glorification of the commodity. The *exposition* promenades were lined with boutique windows dis-

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[55] Paul Dubuisson, *Les voleuses de grands magasins* (Paris: A.Storck, 1902), 53.

[56] Darcy Braddell, ‘Little Shops of Paris’, in *Architectural Review*, July 1926, vol. 60, 5. Cited by Tag Gronberg, *Designs on Modernity: Exhibiting the City in 1920s Paris* (Manchester: Manchester University Press, 1998), 56.

[57] See Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 143. See Taylor, Pierre Chareau (1992), 14; Vellay and Frampton (eds.), *Pierre Chareau* (1985), 142. I return to this subject in my chapter, ‘Dust’.

[58] Amstock, *Handbook of Glass in Construction* (1997), 16.

[59] Georg Simmel, ‘The Berlin Trade Exhibition’ [1896], in David Frisby and Mike Featherstone (eds.), *Simmel on Culture* (London: Sage Publications, 1997), 257.

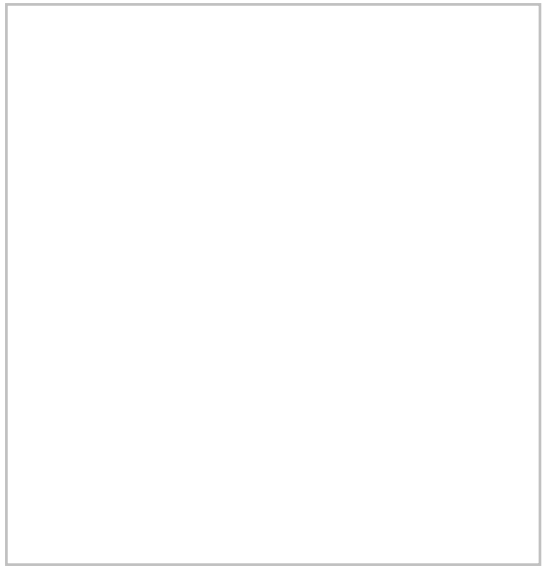

Figure 4.13: Marcel Duchamp, *Porte pour Gradiva,* 1937, 31 rue de Seine.

playing objects, encouraging a culture of window shopping, increasing desire for consumption.[60]

If clear glass reveals something formerly unseen, the neutrality of this image is also its myth.[61] The window always suggests the body – either framed inside, or reflected in the glass from outside. His/her image seen in the glass of the window is one of liminality: trapped between interior and exterior. As Benjamin put it, 'pedestrians in the arcades are, so to speak, inhabitants of a panorama … They are observed from the windows but they themselves cannot see in.'[62] This idea may have been Duchamp's concern when he designed the shop door for André Breton's Gradiva, *Porte pour Gradiva*, 1937, 31 rue de Seine [figure 4.13]. The door, of sheet glass, had the shape of an embracing couple cut from it. This shape appeared as the darkness of the interior. The visitor passed his own reflected image on the surrounding glass from the street side, and entered through the empty image of the couple into darkness.[63]

The reflective architectural look recalls Jacques Lacan's 'mirror stage', introduced in the last chapter. Here, the self is defined for the first time as a unified subject, following the infant's identification of the reflection in the mirror as

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[60] See Gronberg, *Designs on Modernity* (1998), 4–6.

[61] See Richard Sennet, 'Plate Glass', in *Raritan*, 6/4 (Spring 1987), 1.

[62] Walter Benjamin, *Gesammelte Schriften* 5.2 (Frankfurt aM: Suhrkamp, 1972), 1008.

[63] The problem with the door was obvious in that it could not enclose the shop properly, and was destroyed soon after.

himself, an exteriorised image/object.[64] This replaces the fragmented 'body-image' of parts he had formerly composed through the mother.[65] Lacan defines the mirror stage as 'Symbolic', the image as entirety is a false condition, and the self continues to be split into parts, and 'others' across a dynamic field of relations. In window shopping the glass presents a mirrored self image, yet the glass fragments identity into a series of multiple images combined onto the glass surface. Parts of the outside street, viewer (self and passersby), the object on view and the space of the shop window reconstruct the viewer as several. The viewer as consumer gazes at the commodity displayed in the shop window, incorporating her self image onto and as the object to be desired and consumed yet remains fragmented on the exterior.

The windows of the *passages*, *grands magasins* and *expositions* were perfected in particular through the availability and visibility of the female shopper. They offered a dialogue between the plethora of new objects displayed and their audience of bourgeois and working class women alike.[66] Further, the shop window was a space giving new or useful information on female bodies. Women's various understandings of the interior of their bodies came through health and beauty marketing alongside education from schools and medical sources. Mary

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[64] See Jacques Lacan, 'The Mirror Stage as Formative of the Function of I as Revealed in the Psychoanalytic Experience', in Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), 1–6. As discussed in the last chapter, Lacan's *Schema L* expands the mirror stage by also positioning the subject's other 'objects' in a sequential mix.

[65] Lacan, 'The Mirror Stage as Formative of the Function of I as Revealed in the Psychoanalytic Experience' (1991), 5.

[66] See Zola, *Ladies' Delight* (2008); Rhys, *Good Morning, Midnight* (1967); and Violette Leduc, *The Lady and the Little Fox Fur* [1965], (trans.) Derek Coltman (London: Peter Owen, 2007), whose characters see, peruse, desire and purchase goods to change or augment their identities.

Lynn Stewart argues that these aspects borrowed from and informed each other.[67] In Paris, a network of newspaper editorials, advertising and posters combined with the display of the medical and beauty goods they referred to in department store windows. These served both educational purposes and reinforced new body ideals emergent from women's involvement in the First World War. Stewart believes that young women learnt more about popular scientific biology from the 'boulevards, shopping arcades, and department store windows' than formal education.[68] Additionally, as Angus Maclaren points out: 'The Parisian professionals [in abortion] were, according to Drouineau, clustered near the train stations and the "grands magasins"'.[69] The revelation of an object through glass promised a new knowledge on the activities which may take place on the interior of the body. The window formed an architectural mediation between the body and society.

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[67] Mary Lynn Stewart, *For Health and Beauty: Physical Culture for Frenchwomen, 1880s–1930s* (Baltimore, Maryland: John Hopkins University Press, 2001), 9. Stewart also points out that gynaecological texts as well as popular literature depicted interior organs (ovaries, uterus etc.) but were 'less graphic about women's external genitalia', see Mary Lynn Stewart, 'Science is Always Chaste: Sex Education and Sexual Initiation in France 1880s–1930s', in *Journal of Contemporary History*, Vol. 32/3 (July 1997), 384.

[68] See Stewart, *For Health and Beauty* (2001), 35; On 'poster mania' and newspaper advertising related to shopping and street culture, see Hazel Hahn, 'Boulevard Culture and Advertising as Spectacle in Nineteenth Century Paris', in Alexander Cowan and Jill Seward (eds.), *The City and the Senses: Urban Culture Since 1500* (Aldershot: Ashgate, 2007), 157–8, 167–9; Miller, *The Bon Marché* (1981); Vanessa L. Schwartz, *Spectacular Realities: Early Mass Culture in Fin-de-Siècle Paris* (Los Angeles: University of California Press, 1998), 21. Additionally, Duchamp started out as a poster artist; see Molly Nesbit, 'The Language of Industry', in Thierry de Duve (ed.), *The Definitively Unfinished Duchamp* (Cambridge: MIT Press, 1993), 351–394.

[69] Angus McLaren, 'Abortion in France: Women and the Regulation of Family Size 1800–1914', in *French Historical Studies,* X/3, (Spring 1978), 472. See Gustave Drouineau, *Rapport sur l'influence des avortements criminels sur la dépopulation et les mesures a prendre* (Melun, 1908), 11.

Material Survey

The text in this section comprises a visual survey of the *Maison de Verre* and the *Large Glass*. Regarding the theory on the window I have laid out, I identify architectural glass elements – the shop window, vitrine, lens, mirror and screen – to frame various kinds of looking.

The *Large Glass* depicts a relationship between Bachelors and Bride, whilst never allowing their union to occur. It expands this delay through the relationship of its vertical glass plane, to be looked at by a spectator, and its three-dimensional temporality, experienced as walked around. At the *Maison de Verre*, the historic gynaecologist's practice positioned along one edge, radiates into the domestic interior as material and space, object and detail. If the exterior façade veiled, illuminated and exposed the interior of the Dalsace home, the clinic studied the dark interior of the female body, a body which had remained somewhat unknown and misunderstood to women themselves, well into the twentieth century.[70]

The *Maison de Verre* offers a model of the implied spatiality in the *Large Glass*. The (his)story of one follows the other. They are reread as each other's theory. Here, I map the consonance between their historic objects and spaces, positioned against glass.

The layout presents text on the *Large Glass* to the left, and the *Maison de Verre* to the right. As it moves from one to the other and back again, it sets out a dialogue between their parts. Various projects analysing the objects and layout of both works are interspersed.

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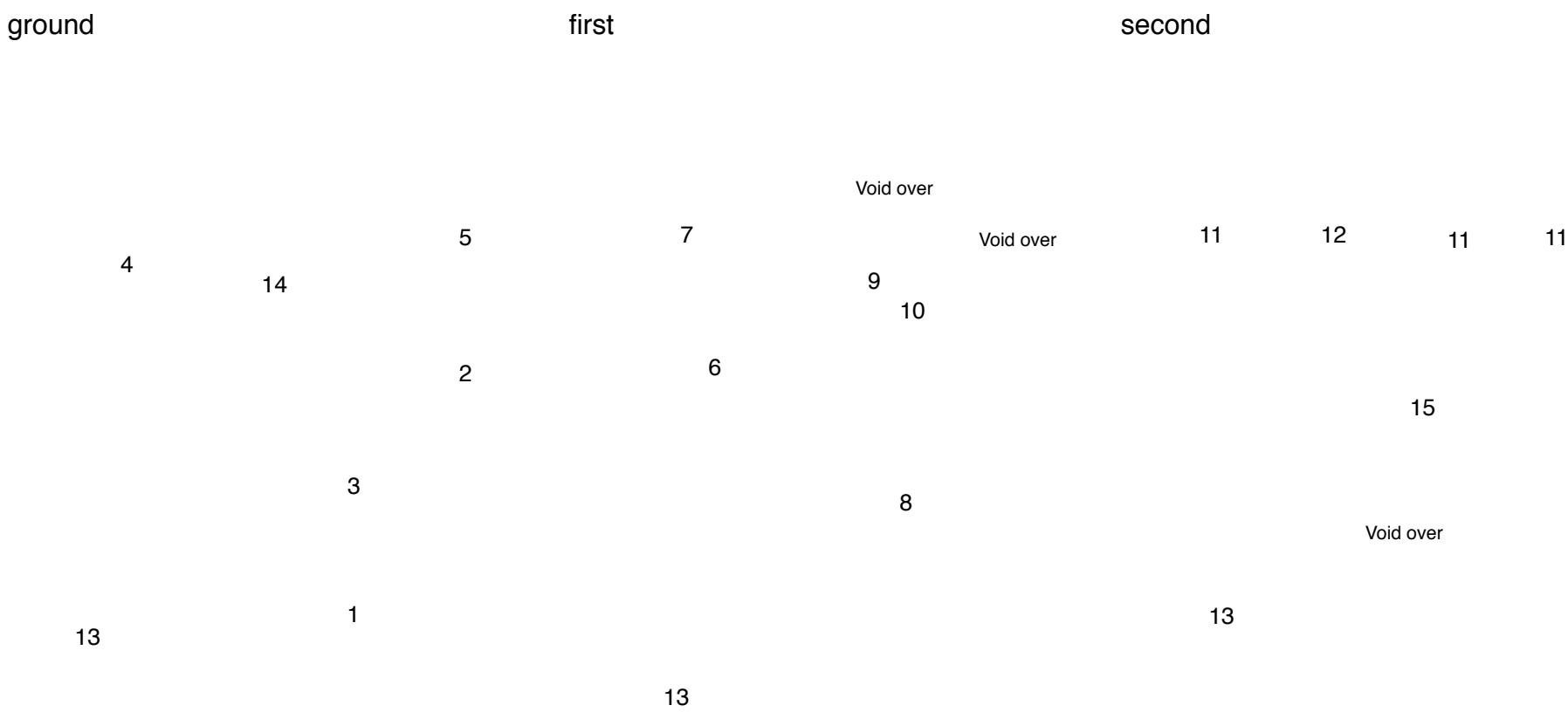
[70] Hélena Gaboriau, *Les trois âges de la femme* (Paris, 1923), 100; Dr Nelly Nelfrand, *Ce que toute jeune fille doit savoir à l'âge de la puberté: éducation sexuelle de l'adolescence. Petit physiologie génitale de l'hygiène d el'homme et de la femme* (Paris: Editions Prima, 1932), 29; Stewart, *For Health and Beauty* (2001), 118

Plate 32: Existing plans, drawn by Bernard Bauchet, my annotations.



1 Entrance / 2 Examination / 3 Surgery / 4 Waiting / 5 Consultation /
6 Dining / 7 Boudoir / 8 Salon / 9 Office / 10 Telephone booth /
11 Bedrooms / 12 Bathroom / 13 Servant quarters / 14 Receptionist / 15
Bedroom corridor

Shop window

Relating the *Large Glass* to a shop window as early as 1913 Duchamp wrote:

> 'The question of shop windows ∴
> To undergo the interrogation of shop windows ∴
> The exigency of the shop window ∴
> The shop window proof of the existence of the outside world
> When one undergoes the examination of the shop window, one pronounces one's own sentence. In fact, one's choice is "round trip."
> From the demands of the shop windows, from the inevitable response to shop windows, my choice is determined. No obstinacy, ad absurdum, of hiding the coition through a glass pane with one or many objects in the shop window. The penalty consists in cutting the pane and in feeling regret as soon as possession is consummated. Q.E.D. [Neuilly, 1913]'[71]

To Duchamp, the shop window created a three-dimensional experience – a visual 'round trip'. It was also the space of desire, codifying the inherent dangers of fulfilment or consummation. His ambitions for the *Large Glass*, were to 'put the whole bride under a glass case or into a transparent cage'; a 'show case with slid-

Figure 4.14: (**top**) Marcel Duchamp, *Large Glass*. (**bottom**) Marcel Duchamp, *Various body part sculptures displayed in glass case,* Philadelphia Museum of Art. Photographs Emma Cheatle May 2010.

[71] Duchamp, 'A l'infinitif', (trans.) Cleve Gray, in Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973), 74.

ing glass panes – place some *fragile* objects inside' [figure 4.14].[72]

Duchamp repeatedly used the term 'delay': a 'picture on glass becomes delay in glass'.[73] Items in a glass case are for displaying, not touching. For Duchamp, capturing something behind/on glass elucidated it, 'delaying' its possession and increasing desire. Seeing forms the desire for possession. To possess or *consume* was to *consummate* (through the act of coitus, in French *coït*).[74]

Further, the making of three-dimensional space from two-dimensional glass is also a delay. The terms 'show case' and 'cage' both indicate the two-dimensional plane of glass was envisaged as an expanded three-dimensional container. Duchamp's notes suggest that the glass is a 'way of being able to experiment in 3 dim. As one operates on planes in plane geometry.'[75] The transparent glass of the *Large Glass* was worked on from behind to depict its cast of characters – Bachelors,

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[72] Marcel Duchamp, 'The Green Box' [1914], (trans.) Cleve Gray, in Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973), 30.

[73] Duchamp, 'The Green Box' (1973), 26.

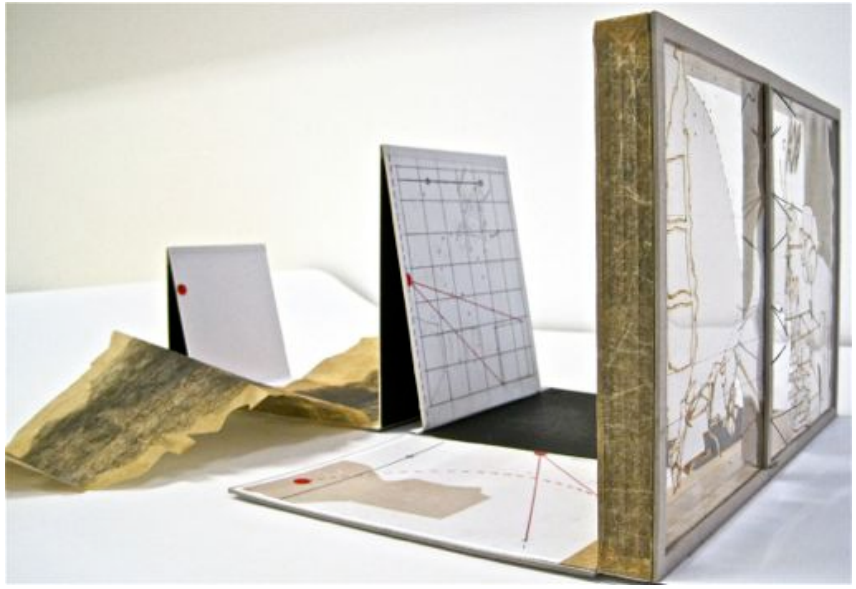
[74] The verb consummate means 'to complete' from Latin *consummat* – 'brought to completion'; it also implies perfection, and fulfillment. The word has come to mean 'make (a marriage or relationship) complete by having sexual intercourse'. In 1920s Paris, the intention was for marriage to lead to procreation. Both imperatives were strongly resisted by Duchamp.

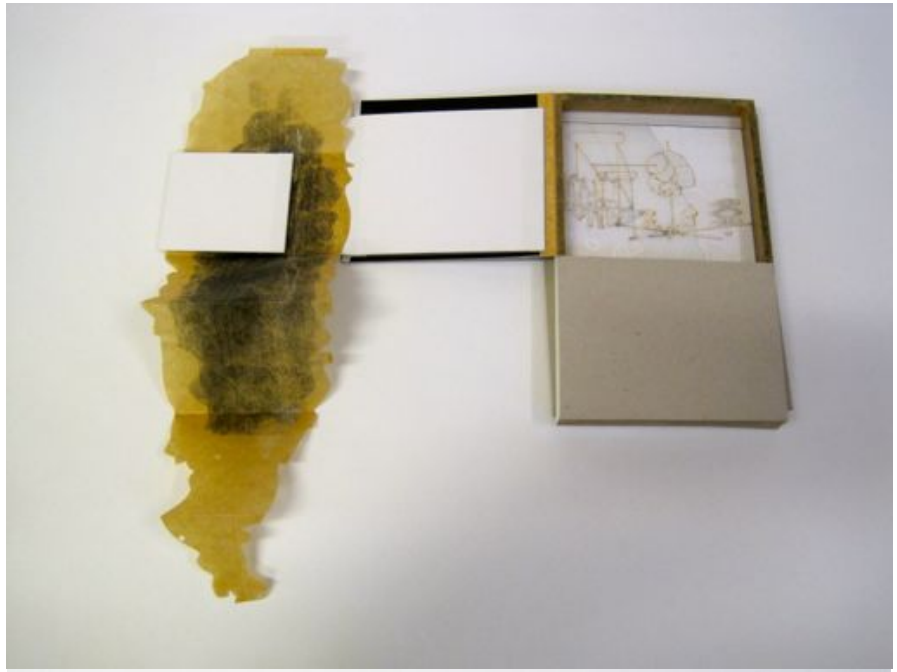
[75] Duchamp, 'A l'infinitif' (1973), 74.

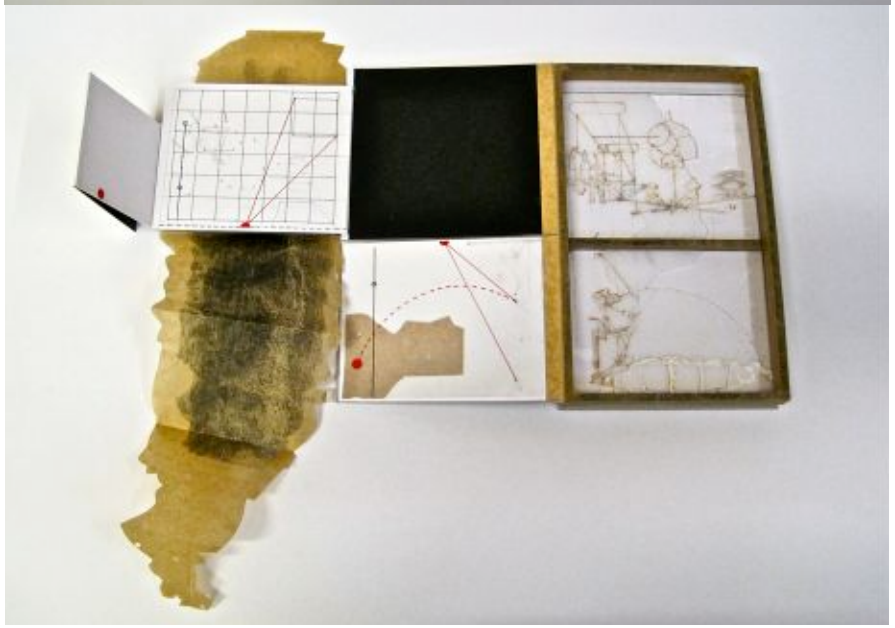
Witnesses, Bride and their operative items, Watermill, Chocolate Grinder, Sieves, Blossoming. When the whole was turned from horizontal to vertical, three things occurred: its two-dimensional plane was transformed into a three-dimensional space with foreground, plane of the glass, and background constructing architectural depth through its surface;[76] from flat elements the objects formed, appearing to float in space; the viewer was positioned and drawn into the 'round trip' of the glass to follow/desire a delayed consummation with the Bride [Plates 33–36].

[76] The laying out of space, object and viewer recalls Albrecht Dürer's *Artist and Model* from *The Painter's Manual*, 1538. [Plate 45].

Plate 33 36: *Collapsed Looking Glass*, framed book/model, acetate, card, paper, photocopies, pencil, 2009.







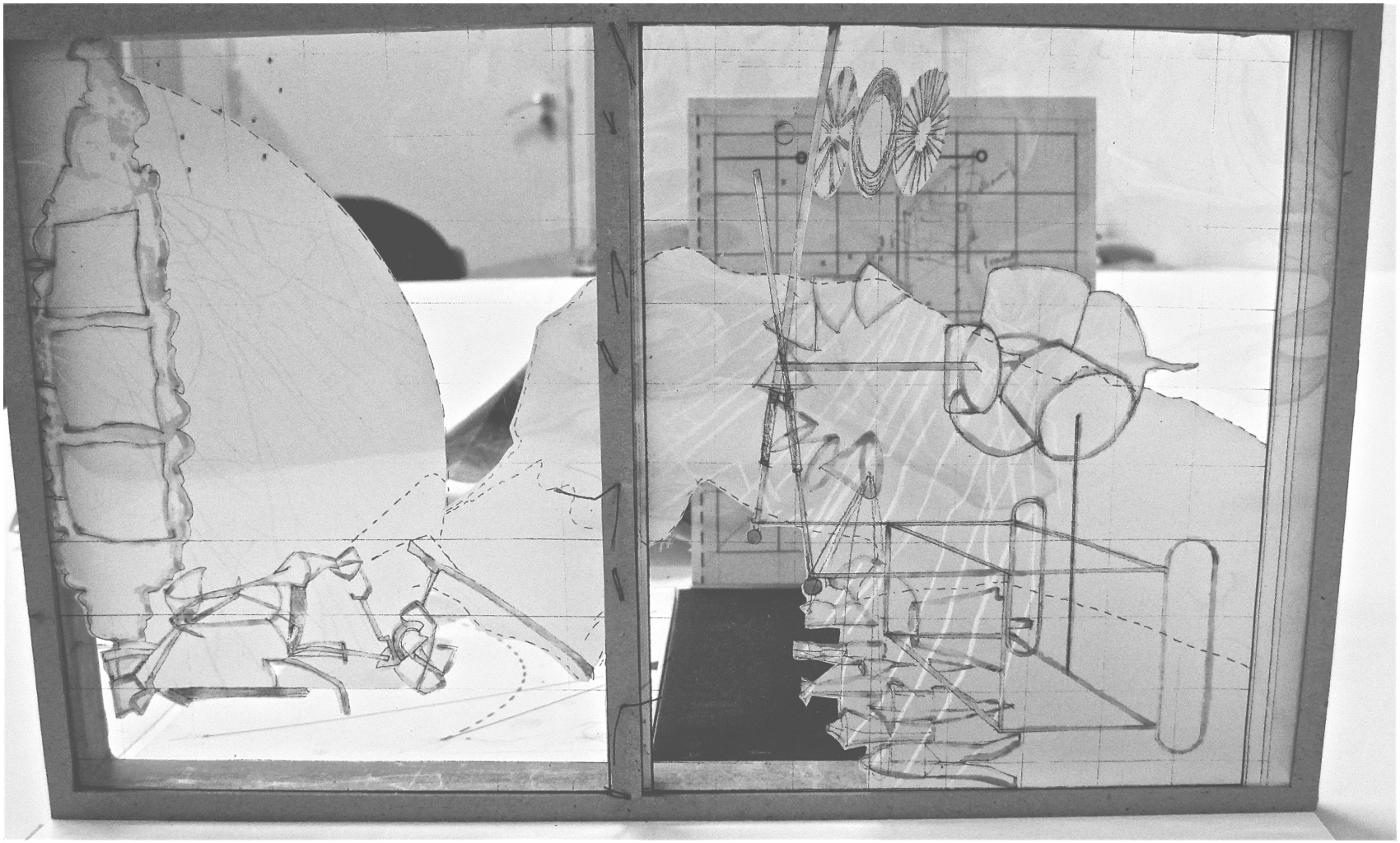
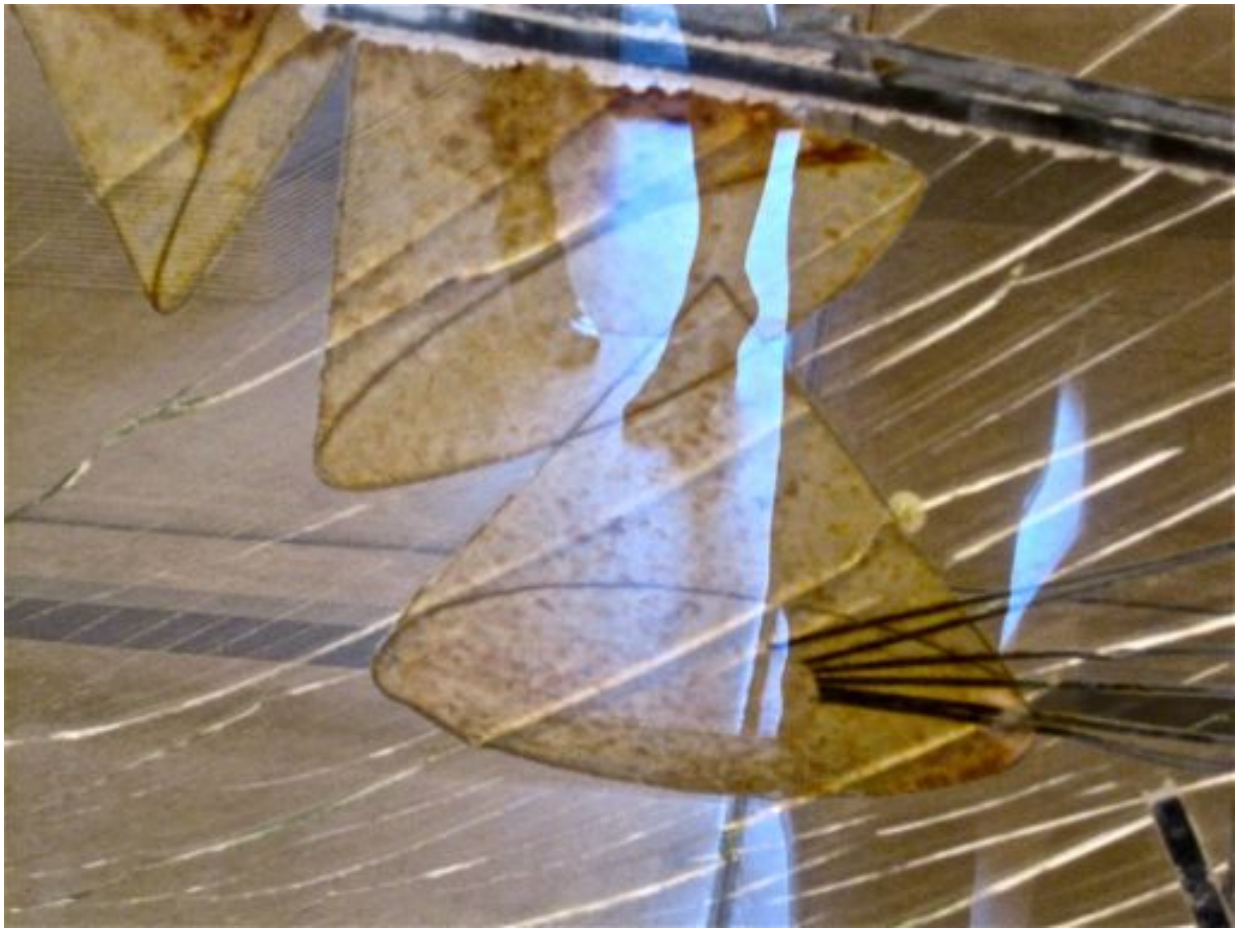


Plate 37: *Reflective Glass Cage*, 2010.



The meaning of the objects portrayed on the *Large Glass* has been much interpreted. They have been described as representations of nostalgic objects in the shop windows of Duchamp's youth, as 'quaint' externalised body 'moulds', mechanical devices or a 'skeletal imprint'.[77] Here, I read them as a constellation of body parts or body references floating in three-dimensions, seen as an imprint like a photograph onto the glass plane. Made from everyday and industrial materials – lead, paint, dust, silver, mercury – they are corporeal, between part-objects and mechanical instruments. The spectator looks, only to become incorporated (consumed) in three ways: as reflection from the foreground on the glass; reflected into the images already there; and as a shadow cast through the glass to the background [Plate 37].

In this way the *Large Glass* is menacing. As noted by Richard Hamilton: 'This illusion of lying behind the glass causes the image's support to transform into an imprisoning vitrine'.[78] This, I believe, was Duchamp's

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[77] See David Joselit, *Infinite Regress: Marcel Duchamp 1910–1941* (Cambridge: MIT Press, 1998), 139, citing Duchamp: 'The chocolate grinder is only a reproduction in two dimensions of an authentic chocolate grinder that I saw every day in Rouen through the window [*derrière la vitrine*] of a confectioner' from Jean Schuster, 'Marcel Duchamp, Vite', in *le surréalisme, même*, 2 (Paris, Spring 1957), 144, translation Joselit's; and Joselit, *Infinite Regress* (1998), 112. Suquet, 'Possible' (1993), 99.

[78] Arturo Schwarz, *The Complete Works of Marcel Duchamp*, (New York: Harry N. Abrams, 1970), 125.

intention. As outlined in 'Background', he thought Parisian bourgeois society was all 'trappings', 'what is called a wife, children, a country house, an automobile'.[79] The 'interrogation' from the 1913 note, carried out through the window, I believe, referred to marriage as a trap. The Bride is imprisoned, in the 'gallows' of society's expectations, a virgin with a 'maiden's attachment to her girl friends and relatives'.[80] She is displayed on the market to beguile the Bachelors into a marriage of financial and social convenience, resulting in procreation rather than conjugal pleasure. Through the parts set out on the glass, Duchamp makes transparent the social mores of 1910s expectations – a bride mechanically groomed for marriage to an unwitting, yet well practised groom.[81] Consuming or consummation meant the possibility of unwanted pregnancy and hence unwanted marriage. The glass case displays Duchamp's own deep resistance, warning the viewer of the 'penalty' of falling for its mechanisms.

The *Large Glass* therefore depicts a perpetual delay to coition. The imprisoned objects indicate the failure of the sexual act. The 'spangles' produced by the

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[79] Cabanne, *Dialogues with Marcel Duchamp* (1987), 15.

[80] Duchamp, 'The Green Box' (1973), 39.

[81] It was accepted that grooms should be sexually experienced before marriage: G.J Witkowski, *La génération humaine* (Paris: Maloine, 1927), 229; Léon Blum, *Marriage* (*Du Mariage* [1907]) (London: Jarreds, 1937), 87–89.

Bachelors fall wasted. The Bride – as Fae Brauer says, 'nothing more than a reproductive machine' – is trapped in the 'endless repetition of unrequited love'.[82] The relationship can never be consummated, delayed at the stage of looking.

Duchamp defines each object between a two-dimensional and three-dimensional 'apparition'. He writes, 'Its apparition is the mold of it', 'By mold is meant: from the point of view of form and color, the *negative* (photographic).'[83] By inverting it he undoes its reality. The objects are ghost-like, absent not only to each other but to the viewer who looks past them through the transparent glass. As such, the *Large Glass* as a whole becomes an absence. When it was exhibited by Dreier in 1926 at the *International Exhibition of Modern Art*, Brooklyn, as Paul Franklyn relates, despite its 'prominent placement ... and Dreier's conviction that its inaugural public presentation would create a stir, critics looked right through it.'[84] Other works exhibited, by Antoine Pevsner for example, attracted more acclaim. Its

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[82] See Fae Brauer, 'Rationalizing Eros: "The Plague of Onan", The Procreative Imperative and Duchamp's Sexual Automatons', in Marc Décimo (ed.), *Marcel Duchamp and Eroticism* (Cambridge: Cambridge Scholars Publishing, 2007), 145, 144.

[83] See Duchamp, 'À l'infinitif' (1973), 85–86. The existence of the Bride and Bachelors is inverse rather than real.

[84] Franklin, 'The Travels of the *Large Glass*' (2009), 217.

glass and enigmatic meaning creates an overlooking as much as a looking.

If the function of the *Large Glass* is to delay/fail marriage and procreation, it presents pleasure as an alternative. The Bride and her Bachelor/s are imprisoned in a vitrine to increase their desire. Ultimately though, neither pleasure nor social convention succeed. The separate parts tell their stories, but lack the capacity for unified pleasure. Duchamp famously became bored with the *Large Glass*, leaving it 'unfinished'. 'Unfinished' also means sexually frustrated.[85] The onanistic Bachelor 'grinds his chocolate himself' via the Chocolate Grinder.[86] Duchamp described the Bride as both 'machine' and a 'bouquet' labouring towards 'blossoming' – the mechanism of the glass, he writes, 'makes this virgin blossom who has attained her desire'.[87] Brauer suggests this is a sham, a fantasy which does not occur.[88] The Bride is merely 'the commodification of sexuality through the shop window displays'.[89]

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[85] Nelfrand, *Ce que toute jeune fille doit savoir à l'âge de la puberté* (1932), advised women who remained unsatisfied after intercourse that they could and should 'finish the job' themselves.' 36–38.

[86] Duchamp, 'The Green Box' (1973), 68.

[87] Duchamp, 'The Green Box' (1973), 44.

[88] Brauer, 'Rationalizing Eros' (2007), 147. Duchamp, 'The Green Box' (1973), 38–45.

[89] Brauer, 'Rationalizing Eros' (2007), 144.

For me, the sexes remain separate specimens clinically trapped in their transparent world, enacting individual displays of onanism. Ultimately, the *Large Glass* is perpetually frustrated; its delay fruitless. In 1923, Duchamp left it and returned to Paris.

Its story does not finish there, though and in 1931, by which time it had been somewhat forgotten, it was discovered shattered.[90] In 1913, Duchamp had referred to 'cutting' glass to gain possession, with the ensuing consummation a necessary disappointment. After the first public display of the *Large Glass*, the two planes were dismantled and placed on top of each other for storage. At some point during transit they were broken in mirror image to each other – an ironic act of unexpected consummation [Plate 123]. Slivers of shattered glass are sharp, dangerously so. Cutting. Duchamp, though, was not 'disappointed' by the 'cutting' of the *Large Glass*, and repaired it by sandwiching the broken planes between two further layers of glass. Its delicate parts and cut shards re-imprisoned, now permanently inaccessible.[91]

1931. In Paris a new glass construction, a private family home containing a gynaecology practice, was nearing completion. If the

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[90] The Brooklyn Museum exhibition, 1926 was the only public display of the *Large Glass* between its completion and repair in 1936. On its breaking and repair see Tomkins, *Duchamp* (1997), 12, 274, 288.

[91] I return to the shattering and repair of the *Large Glass* in 'Air'.

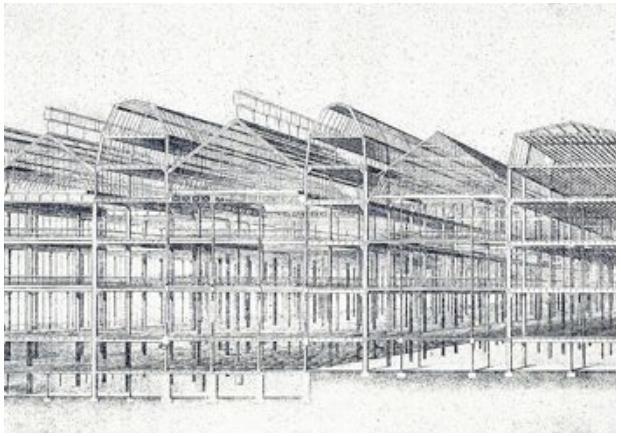


Figure 4.15: Structure of Bon Marché, in *Grandes Usines* (A. Moisant, Laurent, Savey & Cie, 1889). Drawing Turgan, 1889.

Large Glass is a shop window, the *Maison de Verre* is more like a shop floor.

The internal structure of exposed steel I-beam columns, enables the completely glazed front and rear façades to be non structural. The columns, industrial yet painted orange and clad in slate, regularly punctuate the space. Their appearance recalls the shopping interiors of the *grands magasins* where ornate wrought iron columns held up the upper galleries and roof allowing open plan interiors and large shop window displays on the exterior [figure 4.15, 4.16].[92]

The allusion to the shop goes further. In 1930 Frederick Kiesler identified the private shop as a type. Situated within the home and dependant on 'reputation', this kind of shop 'bases part of its attraction on its exclusiveness, part on its homelike atmosphere', 'even window displays may be omitted.'[93] The clinic of the *Maison de Verre* was a glass fronted yet private shop for bourgeois and avant-garde women, accessed through reputation rather than publicity.[94] Reliant on privacy for the practice of gynaecology, the homogeneity of the exterior glass surface conceals a transparently

[92] The *Bon Marché* was the first steel structured department store. Giedion argues that ferro concrete structures came from the iron building of the 19th century. Giedion, *Building in France, Building in Iron, Building in Ferro-Concrete* (1995), 116–118. The *Maison de Verre* was not 'new', then, in the way Le Corbusier's ferro concrete buildings were.

[93] Kiesler, *Contemporary Art Applied to the Store and its Display* (1930), 122. Kiesler went on to make the a fold-out collage triptych of Duchamp and the *Large Glass* as a three-panelled shop window, see Charles Henri Ford (ed.), *View,* 5/1 (March 1945).

[94] Medical clinics were located in large public teaching hospitals. Alternatively physicians treated patients within their own home.

open interior. 'The transformable plan *par excellence*',[95] or 'free-plan', arranged visually and aurally fluid spaces in opposition to the connected, yet discrete interior rooms of the bourgeois Parisian apartment of the nineteenth century [Plate 38].[96] This interior is punctuated with details and components which draw the eye as if across a shop interior.[97] Like Duchamp, Chareau utilised ordinary everyday materials found in the *grands magasins* and industrial settings: glass, steel, aluminium, rubber.

The display windows of the *grands magasins* and the *Large Glass* are absent. If the *Large Glass* is a window without a building, the *Maison de Verre*, though obsessively glazed, is a building without a window. The openings concealed, the glass skins lit from the interior at night, the whole building appears as a large translucent *vitrine.*

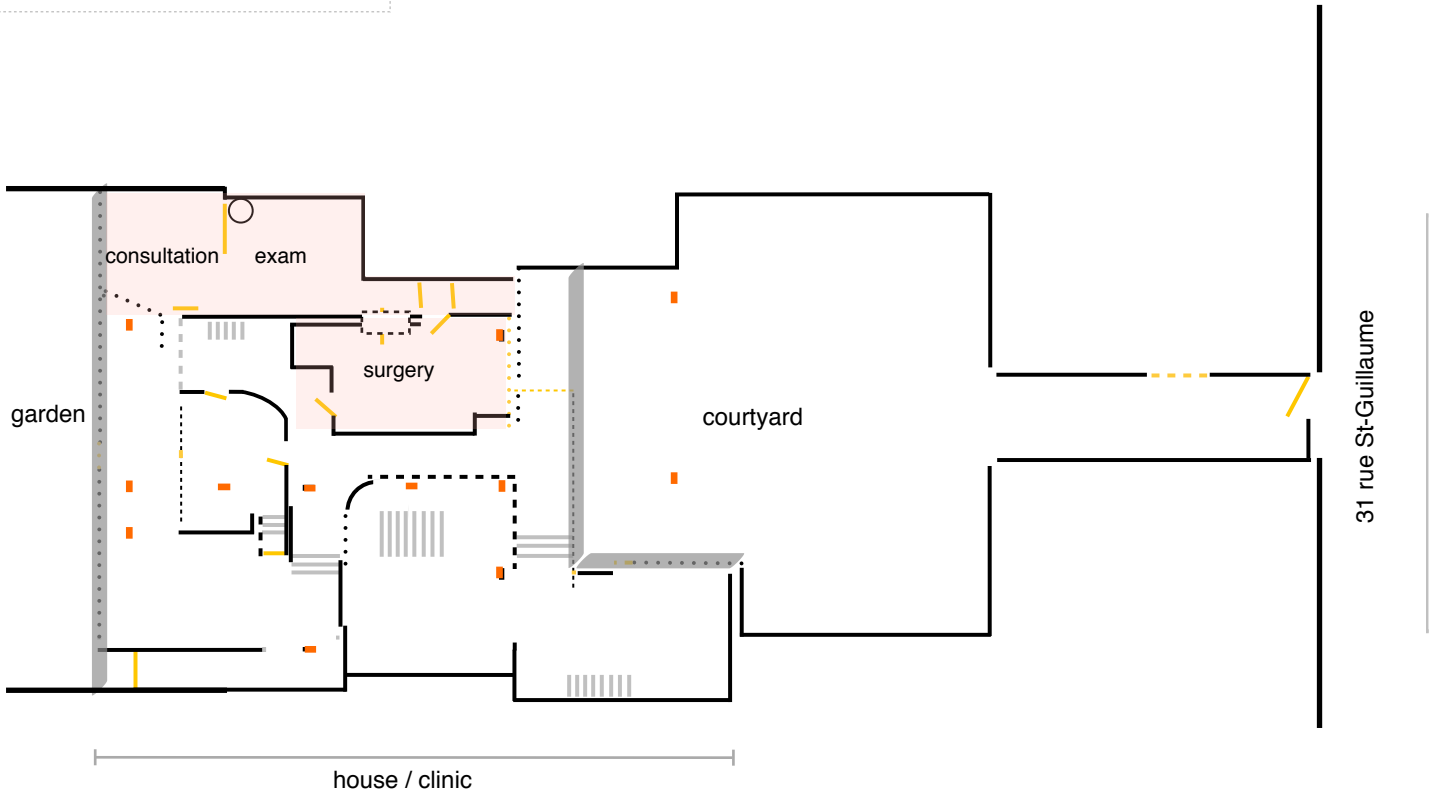
Figure 4.16: L. A. Boileau and Gustave Eiffel, Magasin au Bon Marché, Paris, 1876.

[95] Frampton, 'Maison de Verre', (1969), 79.

[96] The Dalsaces had previously occupied such an apartment at 195 Boulevard Saint-Germain. I come back to the nineteenth century apartment layout in the chapter 'Dust'.

[97] This recalls Zola's descriptions of the shop interior of details to draw the eye of the shopper from one space to another. Zola, *Ladies' Delight* (2008).

Plate 38: Free-plan: ground floor plan of the *Maison de Verre*, 2008.



Key

- exterior glass planes to courtyard and garden
- glass
- doors
- clinical rooms
- columns

Vitrine

The vitrine is a three-dimensional shop window, a glass container, often with opening doors, inviting the viewer to open the *vitre*, (glass pane), and touch the objects inside. At the clinic at the *Maison de Verre* a two sided glass cabinet measuring approximately 1500mm x 1000mm sits in the wall between examination room and surgery. Its interior objects masked between two panes of translucent glass, it serves as a model of the building as a whole.

This vitrine, with sliding doors on both sides, connects the two medical spaces through the depth of the wall and provides a lit square of borrowed light to each room [figure 4.17, Plate 39]. According to the *docent* of the *Maison de Verre*, it housed the doctor's medical equipment and 'experiments' on its transparent glass shelves.[98] As outlined in 'Background', Jean Dalsace was a progressive gynaecologist who risked his reputation to promote contraceptive choice and gynaecological health.

As well as a commodification of sexuality, the Bride also appears to me to be a mechanism or instrument working against 1910s sexual mores. In fact, she literally corresponds to a number of gynaecological instruments depicted in manuals of the time.[99] It is widely accepted that Duchamp studied catalogues for household goods and medical equipment. Juan A. Ramirez has argued that

Figure 4.17: Vitrine seen at centre lit between examination and surgery. Photograph Michael Carapetian, 1966.

[98] Interview with Mary Johnson, 2008.

[99] As my drawings of instruments from Henri Hartmann, *Gynécologie Opératoire* (Paris: G. Steinheil, 1911), in particular 30, 62, 282, 456, 464, 478. [Plate 40.]

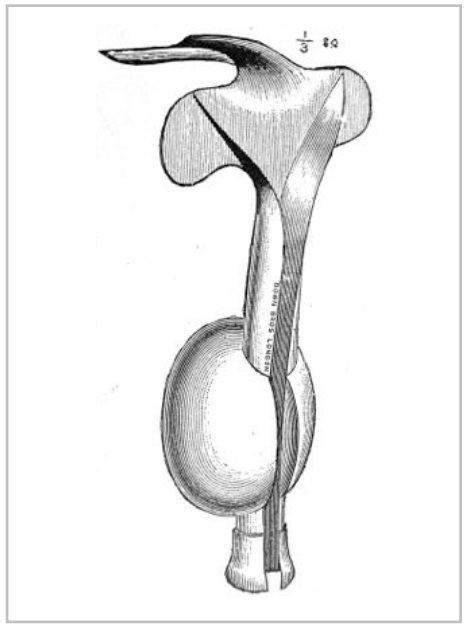


Figure 4.18: Auvard Valve. Charles Truax, *The Mechanics of Surgery* [1899] (San Francisco: Norman, 1988), 444.

part of her is a reproduction of an Auvard valve, a speculum designed by Pierre-Victor-Adolphe Auvard [1855–1941], possibly sourced from P. Hartmann's 1911 catalogue of medical equipment.[100] Ramirez's analysis suggests that Duchamp constructs the female body as an instrument of sexuality, with the speculum standing in for or visualising the female genitalia. I see a further meaning for Duchamp's use of seemingly gynaecological instruments, which I develop over the next five paragraphs.

Modern French gynaecology was founded on the 'look'. Before 1880 gynaecologists rarely practised surgery, instead taking 'pride in their invention of the speculum and their use of manual examinations.'[101] The ancient speculum, Latin for 'mirror', was reinvented by Joseph Récamier [1774–1852]. Until the turn of the nineteenth century, its use was thought of as 'instrumental rape', and reserved for the (forced) examination of prostitutes to safeguard the male population from disease.[102]

The Auvard valve has a long handle containing 'a bulbous enlargement of solid metal, the weight of which, added to that of the speculum, constitutes a re-

[100] See Juan A. Ramirez, *Duchamp: Love and Death, Even* (London: Reaktion Books, 1998), 138–9.

[101] Stewart, *For Health and Beauty* (2001), 134–5.

[102] See Ornella Moscucci, *The Science of Women: Gynaecology and Gender in England, 1800–1929* (Cambridge: Cambridge University, 1990), 123.

traction force sufficient for operative purposes.' [figure 4.18].[103] An essential gynaecological tool in the early twentieth century, it was used to open the vagina sufficiently with its 'bulbous' weight. Probes or other instruments could then be inserted to open the cervix and perform operations and removals, including termination of pregnancy, removal of fibroids and hysterectomy.[104]

Duchamp's Bride appears to be made from several gynaecological instruments including an Auvard Valve [Plate 43]. Further, her name, *Pendu femelle* [figure 2.13], means hanged female. She hangs head down in space.[105] A favoured position for examination by the gynaecologist was with the patient lying tipped almost vertical on a special examination table, her legs held up in 'stirrups'. Her pelvis and sexual organs are raised in the air and her head hanging down [figure 4.19].[106]

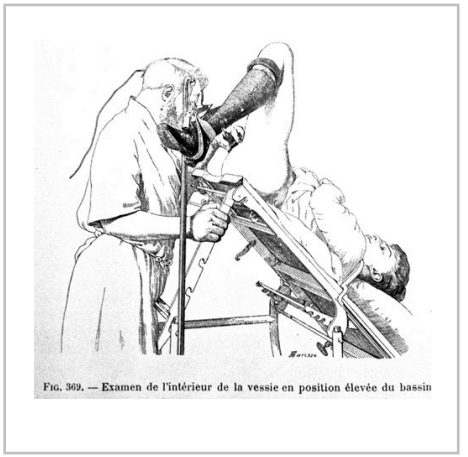


Figure 4.19: Gynaecological operating table, see Hartmann *Gynécologie Opératoire* (Paris: G. Steinheil, 1911), 442.

[103] Charles Truax, *The Mechanics of Surgery* [1899] (San Francisco: Norman, 1988), 444.

[104] See Thomas Clifford Allbutt and William Smoult Playfair (eds.), *A System of Gynæcology* (London: Macmillan, 1906), 65, 859, 786–806; Arthur Latham (ed.), *A System of Treatment: Volume IV* (London: J. & A. Churchill, 1912), 410–11, 433–44, 655. The Auvard is still in use now.

[105] The female Bride (*femelle*) has been hanged (*pendu*) beforehand in the masculine. (*Pendu* should be *pendue* for the female, and follow the noun *femelle*.)

[106] See Hartmann, *Gynécologie Opératoire* (1911), 442. As Moscucci points out, the use of footrests, commonly known as 'stirrups' and the 'strapping' of women to saddles, or tables invoked (and still does) the language of the 'stables, prominent in pornographic fiction.' Moscucci, *The Science of Women* (1990), 125.

The Bride is not the only mechanism. The eight Bachelors are also like part-instruments. Duchamp writes of their penises bisected by, and becoming the plane of the glass. His note reads: 'Each of the 8 malic forms is cut by an imaginary horizontal plane at the pnt. called sex'.[107] The penis, especially erect, was not depicted in manuals of the time.[108] The bisected Bachelors are designed to produce, through a biologically clinical process, 'the illuminating gas', the imaginary flow of semen, a splash of 'spangles converted into liquid scattered suspension',[109] destined for the Bride hanging above. For me, their equipment also has a possible association with penetrative medical instruments [Plate 44]. The Glider which 'goes and comes', has a 'hook– considerably enlarged', 'a sort of fork', 'which opens the scissors'; 'each malic form terminates at the head in 3 capillary tubes', 'long needles' between it and the grinder.[110] With these hooks, capillaries and long needles, the bachelors revert to men-midwives, common

[107] Duchamp, 'The Green Box' (1973),51.

[108] See Stewart, 'Science is Always Chaste' (1997), 384.

[109] Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973), 21: Richard Hamilton's typographical chart of the *Large Glass*.

[110] Duchamp, 'The Green Box' (1973), 51–61.

until the mid nineteenth century, wielding the abortionist's crochet hook.[111]

What is implied by these correspondences is that the Bride, in becoming instruments for inversion, is her own means for opening, making ready the evacuation of her body by the male midwives. Rather than simply a set of genitalia she is a self emptying mechanism. In this Duchamp crucially implies that, although a trap, she aids her (and the Bachelor's) release by his invasive instruments. Abortion was the last resort mechanism allowing sexual relations for pleasure, to maintain the appearance of unconsummation.

> The *Maison de Verre*, as a clinical space, enacted the same potential. Its gynaecological objects have long gone, as have the bodies they looked into and operated on. Before modern gynaecology's 'look', touch alone had been used, the practitioner's gaze averted to maintain privacy and modesty, yet by the early twentieth century, the 'medical gaze' replaced touch.[112] The patient was turned upside down in order to be seen inside out. New medical and glass instruments aided the view into the body. These instruments, although absent, are, for me, suggested within the translucency of the glass vitrine. Having researched many gynaecological texts, I imagine their historical ghostly presence lit through the glass like a radio-

[111] Moscucci, *The Science of Women* (1990), 48. Hook is 'crochet' in French.

[112] Moscucci, *The Science of Women* (1990), 115. Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, (trans.) A.M. Sheridan Smith (London: Tavistock, 1973), 107.

graph [Plates 39–42].[113] By their role in constructing the interior and sexuality of the female body, they stand in for a version of her in the way that the pieces of the Bride in the *Large Glass* stand in for her absent body. They are the medical part-objects of the bodies they represent.

As explored in 'Background', in early twentieth century Paris the emergent discipline of gynaecology was conservative, with female sexuality defined as 'biological', for childbearing alone.[114] Jean Dalsace was one of the minority involved in contraceptive promotion. As we have seen he promoted contraception illegally in the 1930s, and: 'In December 1967, after a long and vigorous campaign led by Jean Dalsace and Raoul Palmer, the Neuwirth bill became law, making contraception accessible to French women for the first time'[115] A leading advocate of the public abortion movement in France, in a homage to Margaret Sanger, Dalsace wrote: 'it is thanks to her that we are entitled to hope that one day contraception worldwide replaces abortion, as abortion had

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[113] Dalsace was also involved in radiography, see 'Radiographic Therapy of Sterility', in *The British Medical Journal*, March 29, 1930. He went on to write: Jean Dalsace and J. Garcia, *Gynecologic Radiography* (Cassell and Company, 1959). The *Large Glass* can be thought of as an x-ray of its narrative. See my chapter 'Dust'

[114] Toby Gelfland, 'Gestation of the Clinic', in *Medical History*, 25 (1981), 169–180; George Weisz, 'The Development of Medical Specialization', in Ann La Berge and Mordechai Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Atlanta: Rodopi, 1994), 167–9.

[115] A. Gus Woltman, 'Review of George D. Goldman and Donald S. Milman (eds.), *Modern Woman: Her Psychology and Sexuality* (Springfield: Charles C. Thomas, 1969)', in *The Journal of Sex Research*, Vol. 6, No. 4 (Nov, 1970), 333.

replaced infanticide.'[116] I speculate that, with these predilections, he may have followed thinking which encouraged women's pleasure, and 'equal experience' as early as the 1920s and 30s.[117] Some, like radical neo-Malthusian Jean Marestan, went as far as promoting that a healthy sexuality was a sign of a robust constitution, and supported the healthy 'exercise' of genital organs. Men, he said, should pay attention to lubricating the vulva and vagina before penetration. He also promoted the use of five different contraceptive devices and abortion on demand.[118] Did Dalsace agree with these sentiments?

The architecture of his clinic, I argue, suggests that it promoted female sexual health for its potential for pleasure (*jouissance*), with the goal of dismantling the inevitability of its procreative imperative. Its vitrine, housing historic gynaecological instruments, imprints an image of a temporary radiograph at its core. As a window it is a negative exposure, or x-ray, envisaging the interior of the body [figure 4.20].

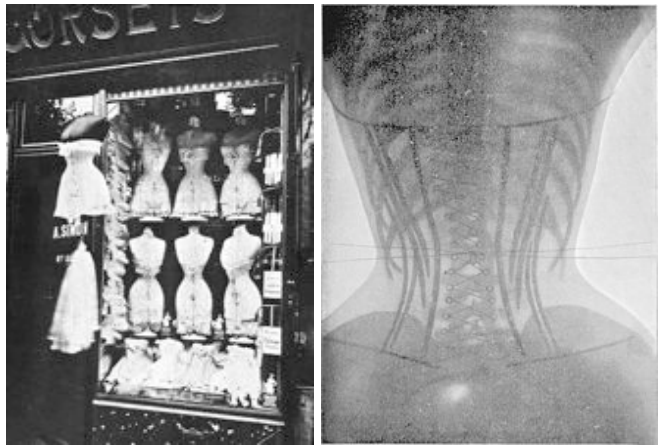


Figure 4.20: (**left**), Eugene Atget, Corests Boulevard de Strasbourg, 1912; (**right**), Dr Ludovic O'Followell, Radiographe d'un thorax de fillette, 1908.

[116] 'c'est grace a elle que nous sommes en droit d'esperer que la contraception remplacera un jour dans le monde l'avortement, comme l'avortement avait remplace l'infanticide' (my translation). Jean Dalsace, 'Hommage a Margaret Sanger', in *Journal of Sex Research* Vol. 3, No. 4, (November, 1967), 268.

[117] See Blum, *Marriage* (1937), 38–39, 227, 259.

[118] See Jean Marestan, *L'Éducation sexuelle* (Paris: Éditions de la "Guerre Sociale", 1910). See also Malcolm Potts, Peter Diggory and John Peel, *Abortion* (Cambridge: Cambridge University Press, 1977), 399.

Plate 39: Vitrine at the *Maison de Verre*, 2008.

Plate 40: Drawings of instruments from Henri Hartmann *Gynécologie Opératoire* (Paris: G. Steinheil, 1911), 2008.

Plate 41: Photographs of gynaecological instruments through gauze, 2010.

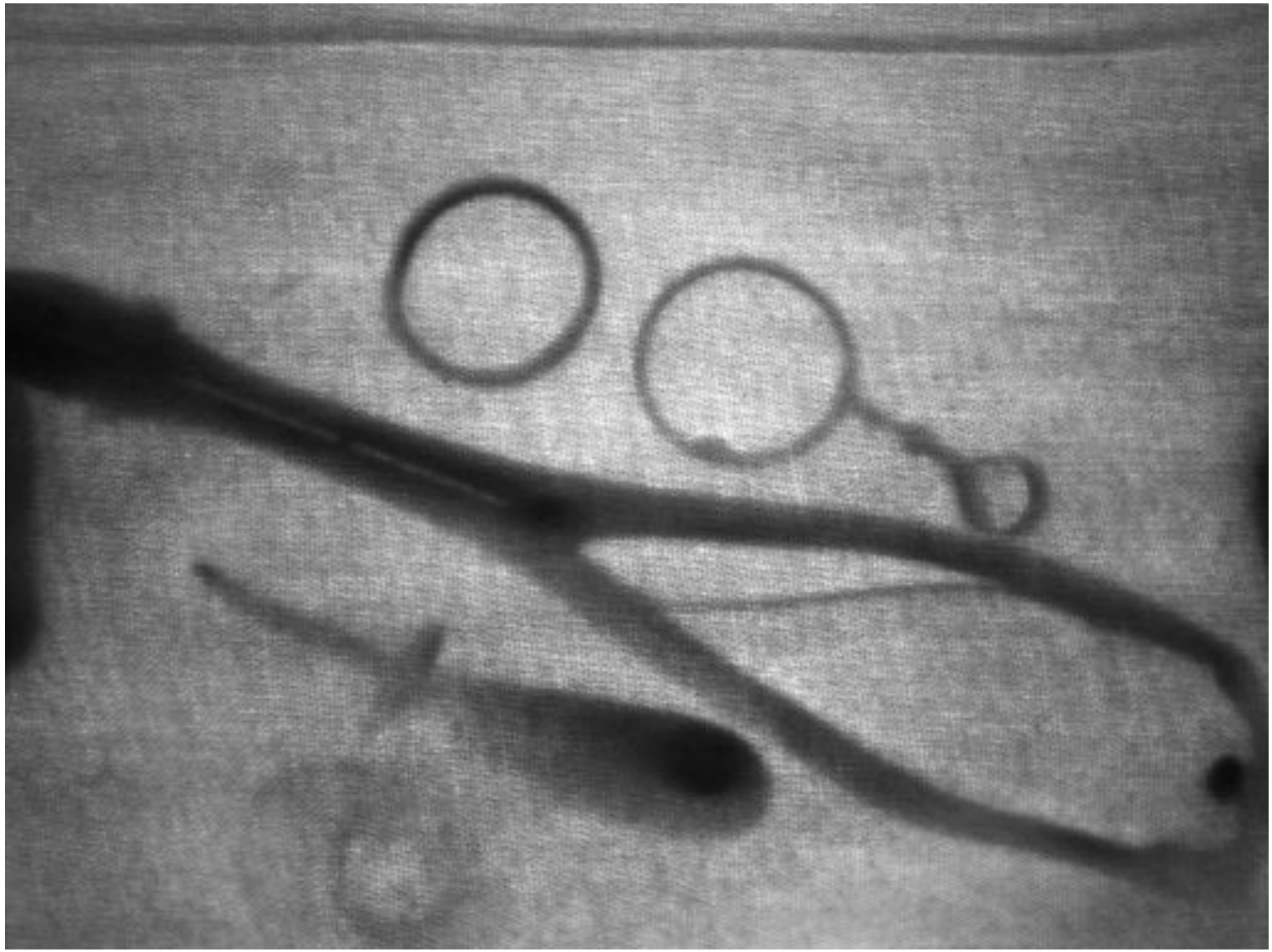


Plate 42: Photographs of gynaecological instruments through gauze, 2010.

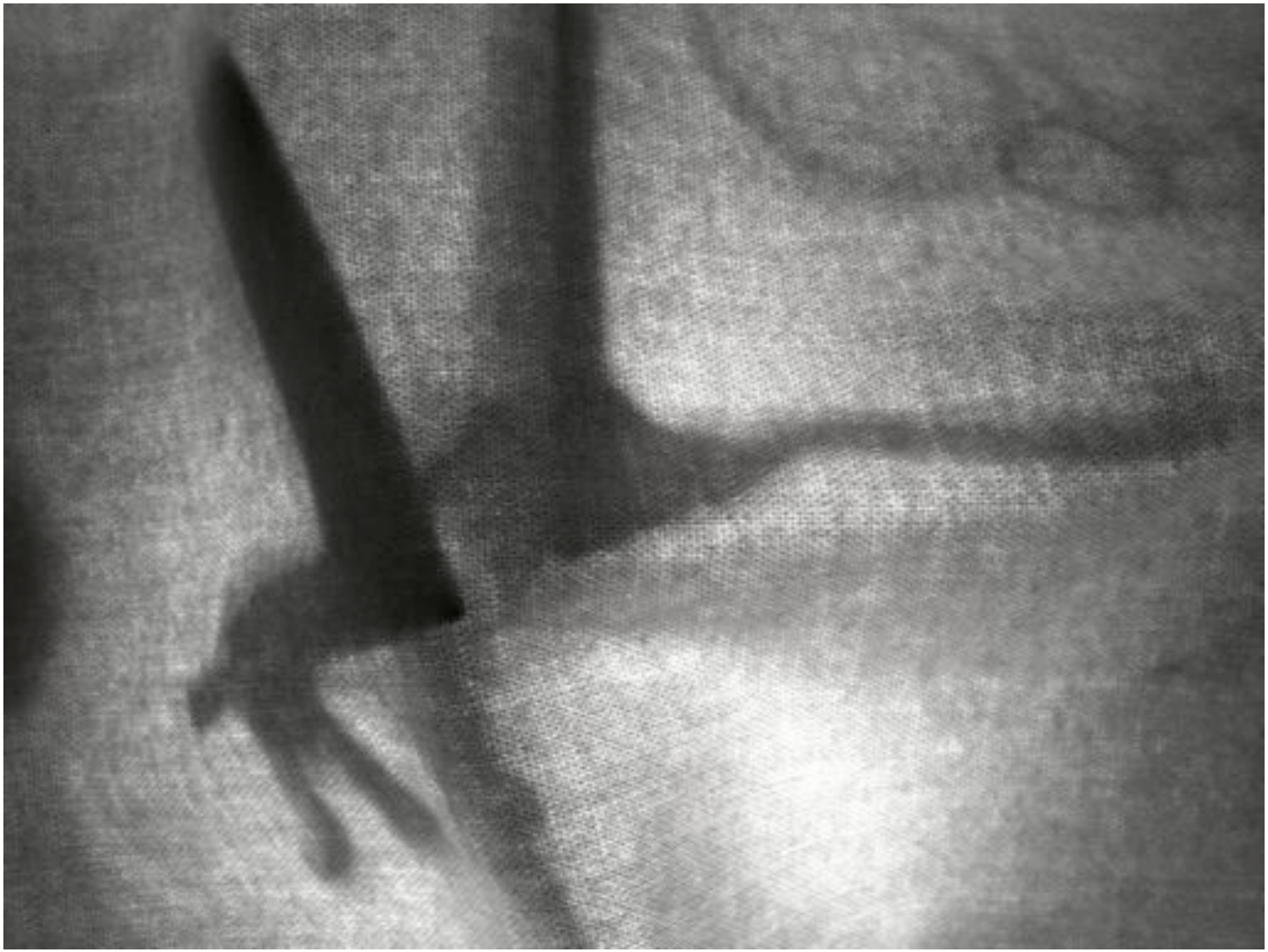
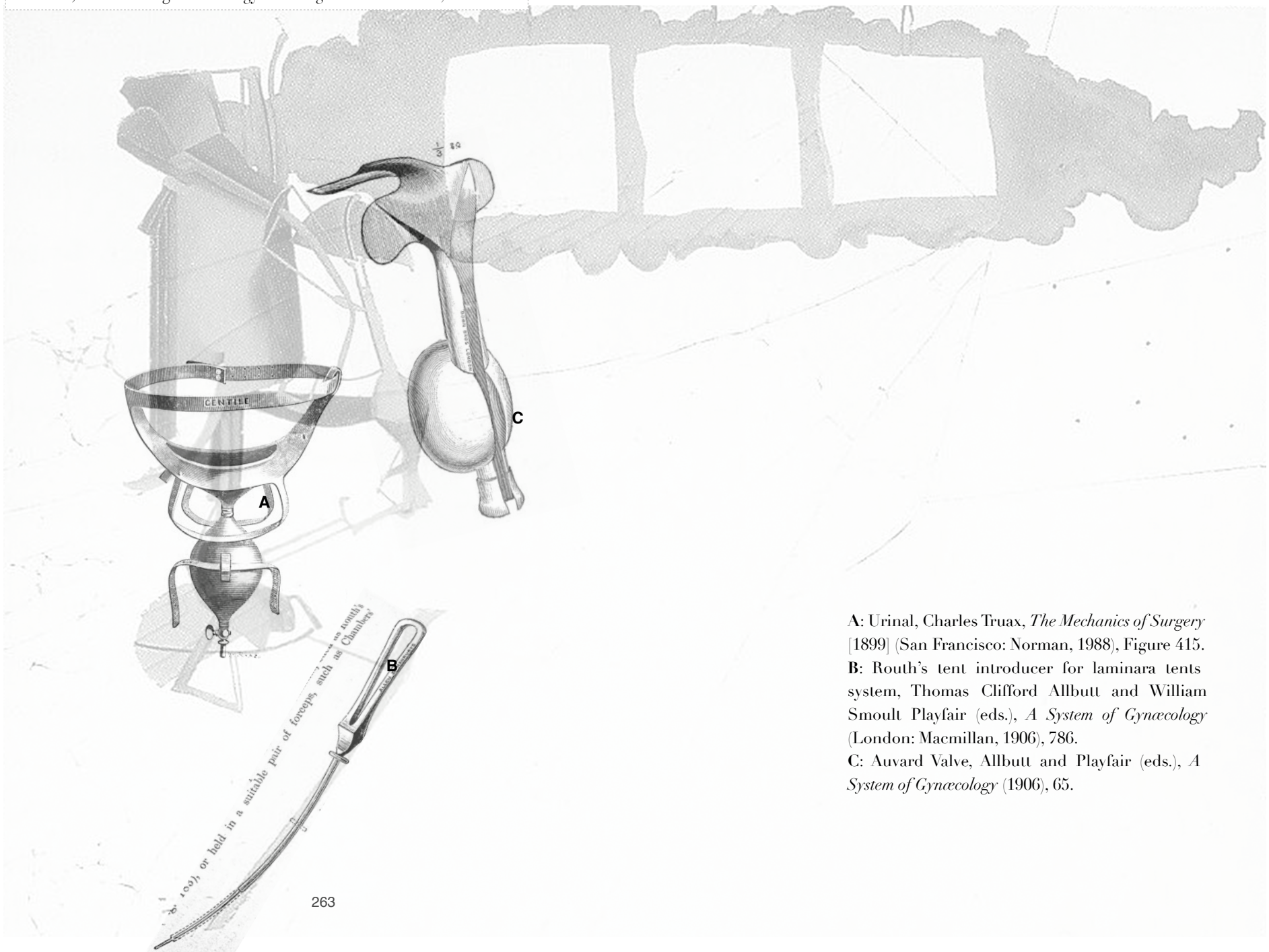
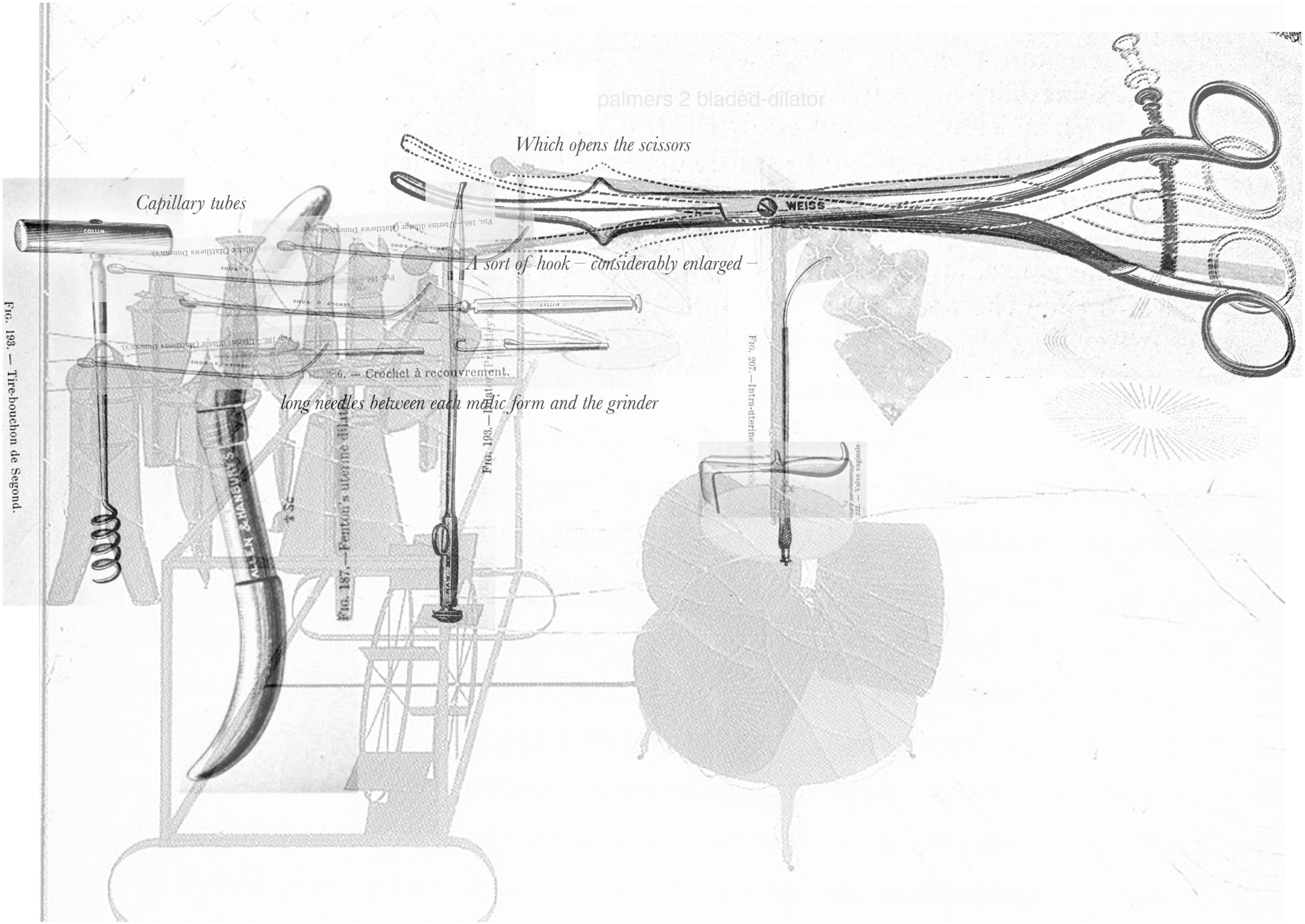


Plate 43, 44: The *Large Glass* as gynaecological instruments, 2010.



A: Urinal, Charles Truax, *The Mechanics of Surgery* [1899] (San Francisco: Norman, 1988), Figure 415.
B: Routh's tent introducer for laminara tents system, Thomas Clifford Allbutt and William Smoult Playfair (eds.), *A System of Gynæcology* (London: Macmillan, 1906), 786.
C: Auvard Valve, Allbutt and Playfair (eds.), *A System of Gynæcology* (1906), 65.


Capillary tubes
Which opens the scissors
A sort of hook – considerably enlarged –
long needles between each malic form and the grinder
WEISS
COLLIN
ALLEN & HANBURYS
Fig. 193. — Tire-bouchon de Segond.
Fig. 187. — Fenton's uterine dilat
Fig. 193. — Hartmann's
Fig. 207. — Intra-uterine
Fig. 222. — Valve vaginale

The clinical suite in which the vitrine is housed, is along one edge of the building [Plate 38]. It comprises three sequential spaces: the doctor's consultation room, an examination room, and a surgery, with a small toilet off the interconnecting lobby. Dalsace's medical practice worked through the sequence of the architecture. Constructed around the gynaecological body, it stretched through the three spaces, lit at each end by a glass wall [Plate 46]. It instated the gynaecological handling of the interior of the female body as a modern visual practice.

Light was key to seeing into the body: 'Light circulates freely, round this block, of which the ground floor was given over to medicine', Dalsace explained, 'The [lightness of the] ground floor the professional part of the house, facilitates work and gives the patients, once their initial anxiety is over, great reassurance.'[119] The lighting and materiality of the architectural features of the three spaces, consultation, examination and surgery, unfold the gaze of the gynaecologist.

The first room, for consultation is cerebral [figure 4.21]. It is here that Dalsace's books and records were kept in a glass cabinet. He seated himself with his back to the lit garden wall to discuss treatment with the patient, overlooked by a sculptural head

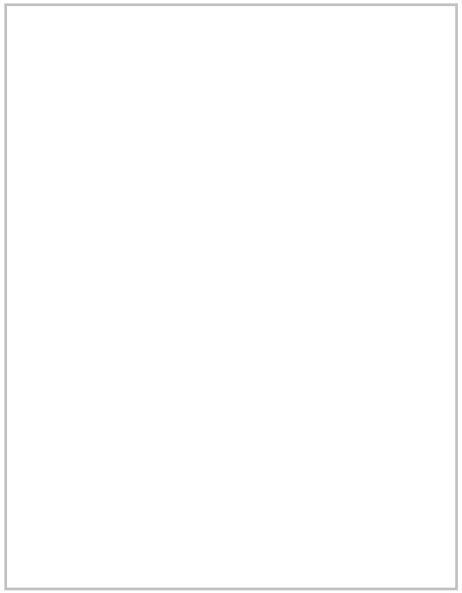


Figure 4.21: Dr's consultation room at the back of the *Maison de Verre*, Annie Dalsace's head to right. Photograph Michael Carapetian, 1985.

[119] 'La lumière circule librement dans ce bloc dont le rez-de-chaussée est voué àla médecine', 'Le rez-de-chaussée, partie professionnelle de l'immeuble permet un travail aisé et donne aux malades, la première inquiétude passée, un très grand apaisement.' Dalsace interview, in René Herbst, *Un inventeur, l' architecte Pierre Chareau* (Paris: édition du Salon des Arts Ménagers, 1954), 7–8. My translation.

of Annie Dalsace, his wife.[120] The light behind him caused his face to be in darkness. A radiograph viewer hung lit against this wall of glass, for displaying x-ray results.

In the examination room, a completely internal room when its sliding wall is closed, the white walls are lined with sheets of white glass. Various pipes, sockets and light fittings are attached. The surface is highly reflective and, if the sliding wall is open, picks up shapes and outlines of the moving bodies as well as a quavering reflection of the glass lenses from the rear façade [Plate 58]. If shut, the bodies in the room are still reflected dimly, absorbed into the glass between the equipment and the architecture. This room is for looking inside but not further intervening.

The final room of the clinic, the surgery uses its vitrine-like qualities in an extraordinary way. The end wall is the inner face of the front façade's wall of glass lenses. The gynaecological table seems to have been positioned here to expose the interior of the body. Further, the clinic's new innovative pieces of technical and architectural equipment – lighting, basins, steriliser, water heater – previously hidden are, like the body, completely exposed, presented both lit, and silhouetted against the glass [figure 4.22]. These, along with the ghosts of gynaecological instruments for looking and intervention in the clinic's vitrine, establish the building's *raison d'être*: the ability to moderate procreation in the pursuit of pleasure.

[120] Bronze, by Jacques Lipchitz, c 1921.

Although there is no explicit information on which clinical practices he pursued at the *Maison de Verre*, I maintain that the glass architecture, completed by the laying bare of the medical suite itself, references Dalsace's medical advances and his support of enlightened sexual politics. The three-roomed gynaecology clinic, though contained in plan along one edge of the building, is reached through the shared spaces of the ground floor of the house. Behind white rendered walls, its functions, transparent to the visiting patient inside, are masked to the interior of the house. A tension is set up by the shared entrance from the courtyard and the ground floor corridor. The waiting area of the clinic, a delay itself, is visible to the free-plan of the rest of the building. The patient is caught there between the front and back walls of glass. The following sections of text argue that, although the clinical suite itself is separated, it permeates the house as a whole, unfolding in different guises throughout.

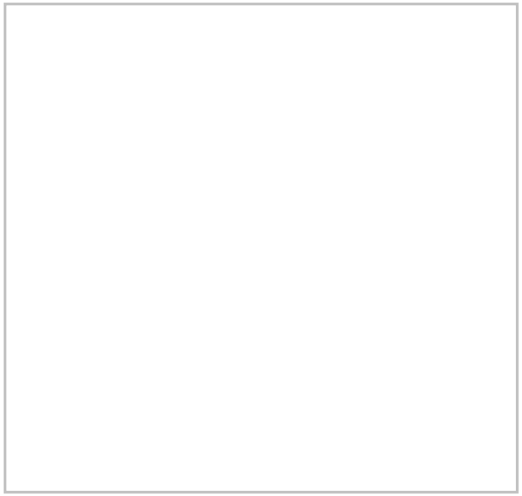
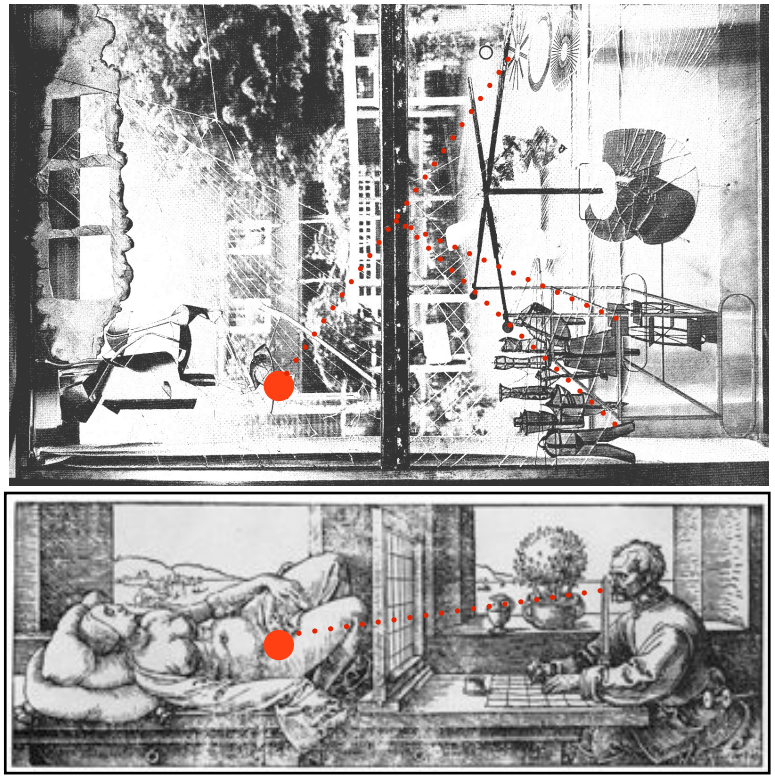


Figure 4.22: Surgery at the front of the *Maison de Verre*. Photograph Michael Carapetian, 1966.

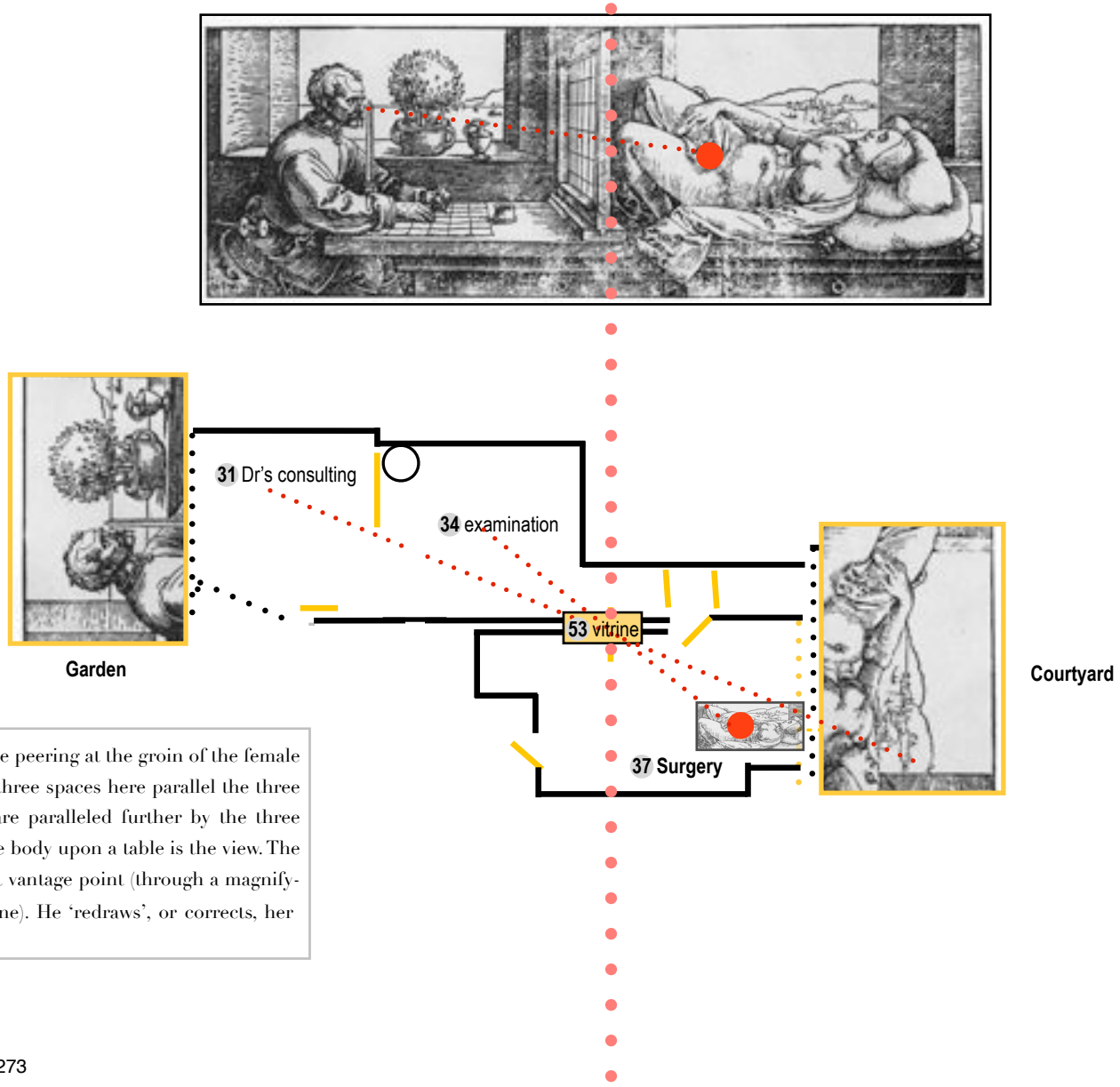
Plates 45: Albrecht Dürer, 'Artist and Model', from *The Painter's Manual*, 1538 associated with the *Large Glass** turned on its side, 2008.



Duchamp does not refer to Dürer in his notes but would have known this etching from his education and time spent working as a librarian at the Bibliothèque Sainte Geneviève from 1913 15.' The etching, an aide to the construction of single point perspective, is composed of two halves. The artist is upright on one side and the object of view lying down on the other. A free-standing gridded picture plane positioned between, organises the gaze. If the *Large Glass* is put on its side (laid down) the (once horizontal now vertical) transom or 'horizon' line (three narrow, on-edge pieces of glass in the original) is a section line between the two halves. When extended it becomes a plane bisecting the two arenas of glass, like the gridded plane of Dürer's etching. This imaginary plane, like that of the etching, delays the gaze (and its desire) between the artist (Duchamp or the Bachelors), and the horizontal nude (the Bride or (a)voided wife). Spatially, the artist is the foreground or observer, the reclining nude female model, an object of desire, idealised as the space beyond. The gridded plane (a window), is a lens or cut between.

* Several writers introduce the potential of perspectival view through a frame in the *Large Glass,* and more directly to analyse the sequence of three spaces in *Etant donnés*. In both analyses the gridded frame in the Dürer is seen to represent the vertical glass in the *Large Glass* and the wooden doors in *Etant donnés*. See Dawn Ades, Neil Cox and David Hopkins, *Marcel Duchamp* (London: Thames and Hudson, 1999), 82, 202; and Judovitz, *Unpacking Duchamp* (1998), 210 11. By lying the *Large Glass* down my interpretation differs.

Plates 46: Albrecht Dürer, 'Artist and Model', from *The Painter's Manual*, 1538 associated with the clinic at the *Maison de Verre*, 2008.



In the Dürer etching the artist appears to be peering at the groin of the female nude reclining: his eye to her vagina. The three spaces here parallel the three spaces of the clinic, and metaphorically are paralleled further by the three spaces of examination. The reclining female body upon a table is the view. The gynaecologist peers at her from his upright vantage point (through a magnifying lens focussing a speculum in his vitrine). He 'redraws', or corrects, her features.

Entrance

The visitor approaches the glass façade of the *Maison de Verre*, moving towards an undercroft to the right backed by a lensed plane. A strip of transparent, highly reflective full height glass windows sit to the left [figure 4.23]. The entrance, hardly visible from a distance becomes apparent closer, perpendicular to the inner and outer layer of glass. The only way in or out of the front of the building, it is a completely transparent, framed glazed door, more like a window. To enter one must press a bell on a black, freestanding vertical steel stanchion in front of the plane of glass lenses. Three buttons, vertically arranged onto a stainless steel plate, are labelled: *DOCTEUR*, *VISITES*, *SERVICE*, in red enamelled text [Plate 47]. Each button is made of brass, with larger curved back rings. Pressing a button rings a different sounding bell on the interior, alerting the housekeeper to the nature of the visitor.[121] The bell incorporates touch into what has been until now a visual experience.

The little entry buttons, with their descriptive labels playfully recall Duchamp's *Prière de toucher* (*Please Touch*), 1947, used for the cover of the exhibition catalogue for *Le Surrealisme*, 1947 and, in 2010, as the bell for the entrance to the 'Surreal House' Exhibition at the Barbi-

Figure 4.23: To the right of the ground floor façade. Photograph Emma Cheatle, 2009.

[121] Dominique Vellay, *La Maison de Verre: Pierre Chareau's Modernist Masterpiece* (London: Thames & Hudson, 2007), 16.

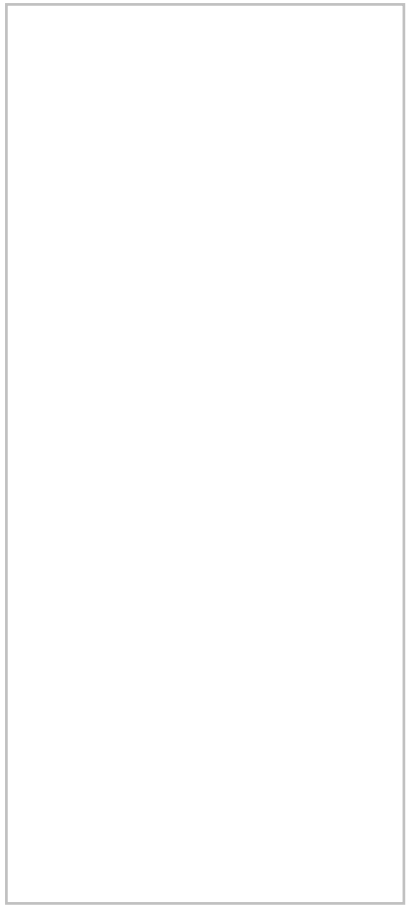


Figure 4.24: (**top**) Entrance vestibule at the *Maison de Verre*. Photograph Yukio Futagawa. (**bottom**) Marcel Duchamp, *11 rue Larrey*, 1927. Photograph by Marcel Duchamp.

can in London.[122] A peachy foam breast is centred by a little pink button nipple asking one to do just that. As a fragment and representation, it presages his 'erotic' sculptures of the early 1950s, which are uncannily like ex-votos, particularly those used to safeguard women from disease as pre-modern gynaecological offerings [Plate 48].

> Entering through the glass door, one can see along the length of the corridor to the service area rather than into the main body of the house, with inner reflections on the front glazing to the left and a double panel of cast wired glass sliding doors to the right. It is an uncertain, totally glass space one enters, a kind of vestibule to the vitrine. Even though the visitor has declared her identity she does not seem to have yet entered the building [figure 4.24].

In 1927 Duchamp installed a door in his tiny apartment at 11 rue Larrey. Described as a visual pun,[123] it was shared by the bathroom and bedroom, reached from the main studio space [figure 4.24]. When the bathroom was shut the bedroom was visible; when the bedroom was shut the bathroom visible. Caught between two states, transparency and opacity, the door was paradoxically

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[122] *Le Surrealisme en 1947* (Paris: Pierre à Feu, 1947). It is thought the breast was cast from the body of Duchamp's lover, Maria Martins. Michael R. Taylor, *Marcel Duchamp: Étant donnés* (Philadelphia: Philadelphia Museum of Art; New Haven; London: Yale University Press, 2009), 69.

[123] Dalia Judovitz, *Unpacking Duchamp: Art in Transit* (London: University of California Press, 1998), 101, 113, 200; Arturo Schwarz, *Marcel Duchamp*, (New York: Harry N. Abrams, 1975), 130.

open and shut at the same time; it was therefore unable to fully contain or enclose the activities of the spaces: a choice had to be made between privacy in the bedroom or privacy in the bathroom.

Plates 47: Buzzers at the *Maison de Verre*, 2011.

Plates 48: Ex-votos and Duchamp's Erotics, 2012.

A. Ex-voto breast, Acropolis: Staatliche Museum, Berlin.
Votive plaque with breasts and a dedication to Zeus Hypsistos. Limestone, Roman Imperial Era. From Golgoi, Cyprus. [Commons wikimedia]
Marcel Duchamp, *Prière de toucher* (*Please Touch*), 1947. Cover of *Surrealisme*.

B. Terracotta ex-voto vulva, Museo Nazionale di Villa Guilia, Rome.
Marcel Duchamp,.*Coin De Chasteté* (*Wedge Of Chastity*), 1954, Philadelphia Museum of Art.
Marcel Duchamp, *Feuille de vigne femelle* (*Female Fig Leaf*), 1950, Philadelphia Museum of Art.

C. Terra cotta ex- voto genitalia. Museo Archilogico, Florence.
Life size terra-cotta body parts recovered from ancient Corinth, votive offering to the god Asclepius.
Marcel Duchamp, *Objet-dard* (*Dart-Object*), 1951, Philadelphia Museum of Art.
Marcel Duchamp, Erotic objects, 1959, Philadelphia Museum of Art.

Ex-votos from Harold Speert, *Obstetrics and Gynecology: A History and Iconography* (London: Parthenon, 2004), 22, 424, 428.

A

B

C

Lens

The glass wall to the surgical room consists of one hundred and sixty 'Nevada' lenses, in two rows of four panels. Standing by the entrance buttons, the lenses, close to, become singular objects [figure 4.25]. With an optical association – shape, circular concavity and single surface – the lens is a motif for the gynaecologist's eye. Each greenish glass 'eye', looking at a body inside, begins to resemble a breast, belly, womb.[124] The lens associates with these body parts in several ways: the concave inner surface implies a mould to a breast; the faceted outer surface a petri dish mottled with disease; in material, form and history there is a relation to concurrent glass objects for optical, contraceptive and therapeutic use in gynaecological practices [Plate 49].[125]

The lens differentiates the exterior from interior of the building, orientating the visitor. The flat exterior forms a textured outer skin to the urban setting. The concave inner hollow forms a smooth face to the interior of the building, the spaces containing the body. In two places, completely interior elements are made of lenses. Firstly, a piece of the rear exterior façade wraps internally to form a screen wall to the doctor's consulting room. The lenses,

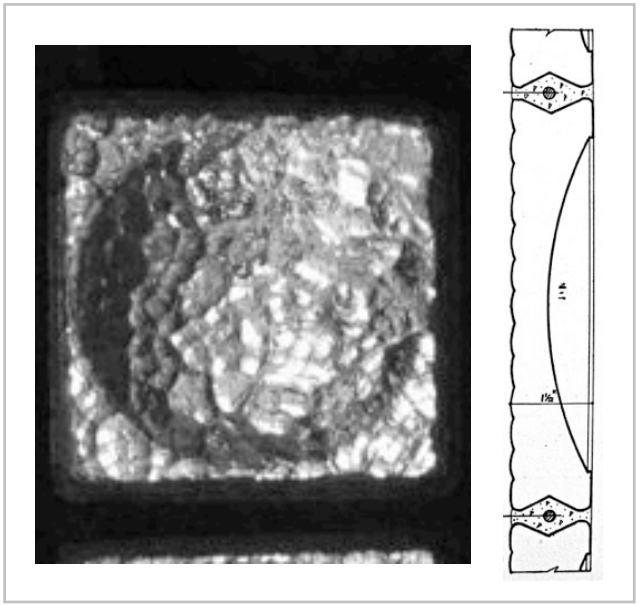

Figure 4.25: (**left**) *Maison de Verre*, 'Nevada' lens detail. Photograph Emma Cheatle, 2010. (**right**) Drawing from McGrath and Frost, *Glass in Architecture and Decoration* (1937), 205.

[124] This recalls Rosalind Krauss' description of Duchamp's 'optical machines', the *Rotoreliefs* are as a circle alluding to the 'breast, eye, belly, womb', Rosalind E. Krauss, *The Optical Unconscious* (Cambridge: October Books, 1993), 79. See my discussion in 'Part-object, Part-architecture'.

[125] See Pust's pessaries, contemporary contraceptives, the diaphragm (filled with a distorting jelly) and other glass objects, like specula, images sourced from http://www.phisick.com; http://www.jnmhugateways.unimelb.edu.au/mhm/MHMS051.htm; also see Hartmann, *Gynécologie Opératoire* (1911), 67, for *Électrothérapie*.

initially with their concave side to the interior, turn inside out as they wrap into the interior space, presenting the concavity to the waiting room aspect. As the patient passes to the right of this piece of lensed wall into the consulting room she is therefore presented with the exterior face of each lens as if passing outside the building before entering it again. Thus the consulting room is positioned outside the building, lens marking the separation of clinic from home [Plate 60].

Secondly, on the upper floor, a bath within the girl's bedroom is separated by a panel of lenses from the bathroom of her younger brother. The boy's bathroom, also for public use, is reached off the corridor. The strange panel, three lenses wide and seven high, is situated to the end of the girl's bath. As the girl stands to dry herself the light coming from behind her creates a greenish silhouette, visible within the boy's bathroom. A young boy's voyeuristic look is established. In an ambiguity about who is inside looking in and who is outside, he faces the inner surfaces of the lenses. He appears to be on the interior and she exterior [Plate 52].

As referred to earlier, the medical practice of Dalsace was undoubtedly influenced by what Michel Foucault identified as the 'medical gaze'. Foucault writes: 'The observing gaze refrains from intervening: it is silent and gestureless. Observation leaves things as they are; there is nothing hidden to it in what is given.'[126]

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[126] See Foucault, *The Birth of the Clinic* (1973), 107. The effects of the gaze on maternity are absent from Foucault's work.

Foucault's 'gestureless gaze' finds parallel with the idea of the neutrality of the gaze through the transparent window. On the contrary, the lens intervenes. It offers a thick vision, greenish and translucent. Instead of giving an enhanced view its name suggests, each lens acts as an individual receptacle for blurring vision, installing sensuality in its place and secreting an obscure interior beyond.

Duchamp glued several magnifying lenses to the glass surface of his study for the *Large Glass*, *To Be Looked at (from the Other Side of the Glass) with One Eye, Close to, for Almost an Hour*, 1918. When the viewer looks close through a lens though, it paradoxically blurs rather than magnifies [figure 4.26]. Similarly, the Oculist Witnesses on the *Large Glass*, made of silvering to the glass, are abstractions of sight rather than optical enhancements, (see 'Mirror' following) [figure 4.27].

On the exterior façades of the *Maison de Verre* the lens is repeated over 2500 times. From a distance the front façade forms a thickened skin, blurring and silhouetting. Closer, the lenses appear to 'look back' at the viewer, deflecting the view. Very near, almost touching a single lens with one's eye, the body being examined beyond the lens by the gynaecologist is refracted hazily onto its interior surface, almost as a pinhole camera [Plate 74].[127]

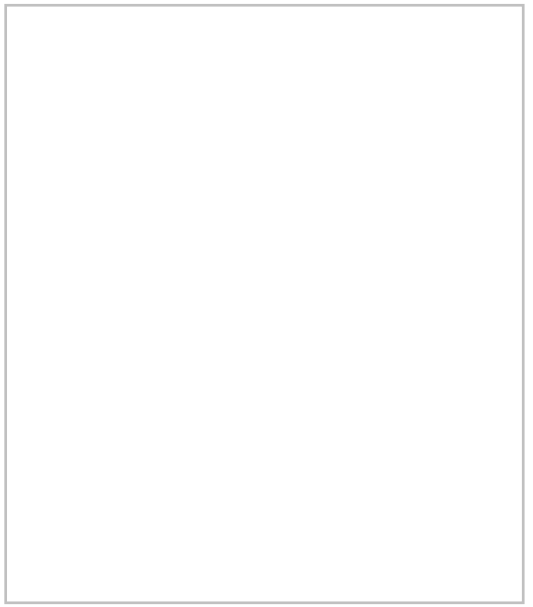


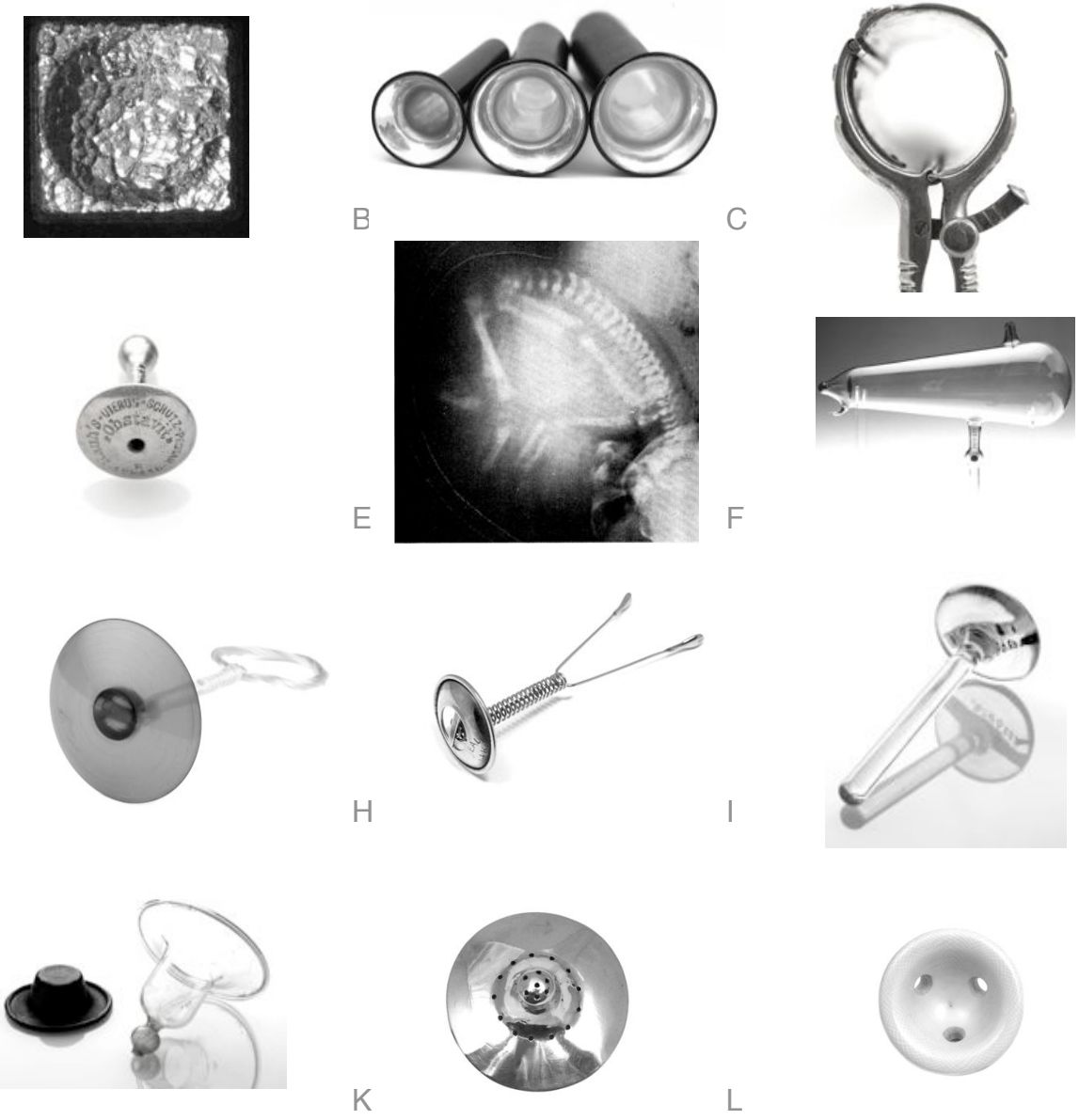
Figure 4.26: Marcel Duchamp, *To Be Looked at (from the Other Side of the Glass) with One Eye, Close to, for Almost an Hour*, Buenos Aires, 1918. Photograph Alex Zambelli, 2010.

[127] Early on, the house was described as cinematographic: 'The Chareau House is not immobile nor is it photographic; it is cinematographic.' See *L'Architecture d'Aujourd'hui*, No. 9, (November/December 1933), 9.

Plates 49: Cataloguing glass and silver/gold objects associated with medical practice at the *Maison de Verre*, 2009.

Glass and heavy metal medical objects objects from 1900 1940.

A: 'Nevada' Lens pressed glass, 1928
B: Nested Fergusson speculum glass silver, black gum, 1871 1900
C: Charriere tri-valve vaginal speculum unplated silver with zinc alloy, ivory, 1839 1900
D: Rauch IUD 'Stem Pessary' aluminium, 1925 1935
E: Early x-ray slide of pregnant abdomen 1936
F: X-Ray tube glass, 1896
G: Pust's stem pessary IUD glass, silk windings, 1926
H: 'Wishbone' IUD stem pessary 14K gold, 1880 1936
I: Stem pessary glass, 1920
J: Nipple shield glass, 1851 1900
K: Nipple shield silver, 1890
L: Duffin's pessary for prolapse ivory, 1890



Mirror

The *Large Glass* was a 'mirror' to Duchamp's preoccupations, and the societal imperatives he resisted. In the notes he writes he will 'make a mirrored wardrobe … for the silvering.'[128] An object seen in the mirror is: 'a kind of mirror image looking as if it were used for the making of this object, like a mold, but this mold of the form is not itself an object'. A reflective 'return'.[129] For Duchamp, the mirror is a mechanism, then, for 'returning' an image as apparition. The plane of mirror is a cut, its momentary display replaces the existence of the original object.

The Oculist Witnesses of the *Large Glass*, 'parts to look at cross-eyed, like a silvered glass, in which are reflected the objects of the room', were devised to deliver the Bachelor's semen up to the Bride [figure 4.27].[130] To create them Duchamp 'took the glass panel to a mirror manufacturing plant on Long Island' scratching away the silver 'over the next few months', to create the 'circular patterns of radiating lines'.[131] The intended 'return' of the semen as Illuminating Gas up to the domain of the Bride through the mirrored Oculist

Figure 4.27: Marcel Duchamp, *Oculist witnesses,* the *Large Glass,* 1915–23. Philadelphia Museum of Art. Photograph Emma Cheatle, 2010.

[128] Marcel Duchamp, 'The 1914 Box', (trans) Elmer Peterson, in Michael Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973), 25.

[129] Duchamp, 'A l'infinitif' (1973), 85, 83.

[130] Duchamp, 'The 1914 Box' (1973), 65.

[131] See Tomkins, Duchamp (1997), 229.

Figure 4.28: Façade of the *Maison de Verr*e. Transparent glass to left as framed double sections. (**top**) Drawing Bernard Bauchet. (**bottom**) Photograph Emma Cheatle, 2009.

Witnesses never occurs as Duchamp omitted the Ventilator device which transferred it. Instead, an image of the surrounding room is absorbed in the silver lines. The mirror's return is the delay at the heart of the *Large Glass*, mopping-up, or absorbing, rather than relaying the liquid.

> 'The mirror image would seem to be the threshold of the visible world'.[132]

Where transparent glass is used in the *Maison de Verre* it is highly reflective, giving repeated images of both the visitor and other parts of the building. Initially, the visitor approaches the ground floor entrance façade glass. This portion of the façade, consisting of large framed transparent panels, is highly reflective, doubling both the surrounding eighteenth century context and the visitor, who appears to leave an image outside the building. Each panel, divided horizontally in half, recalls the scale and arrangement of the *Large Glass* with its two panes separated across the middle by a transom [figure 4.28]. As the visitor gets closer, the reflections deflect any interior views. Instead, the narcissistic image 'imprisons [her]. Fascinated [she] stands in front, absorbed, separated from reality and alone with vanity'.[133] The mirror increases the threshold to entry to the building, resisting the interior [Plate 50].

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[132] Lacan, 'The Mirror Stage as Formative of the Function of I as Revealed in the Psychoanalytic Experience' (1991), 3.

[133] This text, originally written by an unknown German author, was translated by Duchamp into English, as a 'literary readymade' and published in 1934. See Cros, *Marcel Duchamp,* (2006), 190. Here I have altered Duchamp's 'his' and 'he' for 'her' and 'she'.

The *Maison de Verre's* interior uses few actual mirrors. An exception exists on the ground floor. As the visiting patient moves into the interior of the building towards the clinic waiting room, she sees a black and orange column a few metres before her, upon which is mounted a mirror. This is at the very height to reflect back an image of her crotch area [Plate 63]. She walks forward. Descending three risers to the waiting area, the level of the mirror now reflects her face [Plate 64]. An apparition: crotch becomes eye or gaze. If she had forgotten why she was visiting the clinic, this is a visual return of herself through the gynaecologist's eye – patient as medical object.

The use of reflective black lacquered doors and polished glass throughout the building gives a sense that it is composed of repeated images with parts of the occupants and built forms reincorporated into the spaces. Because of the nature of the materials, the image one might look for, the clear picture of the self, is absorbed, distorted The free plan becomes labyrinthine as it repeats and distorts the body and space [Plates 56, 57, 67].

The second floor of the *Maison de Verre* of bedrooms and bathrooms is essentially 'private', internalised and layered, for dressing, bathing and procreation. Opposing the openness exhibited on the floors below, views are curtailed, though the bedrooms are internally interconnected. The 'private' corridor access to the bedrooms, with glimpses of the salon below, is lined with full-height black lacquered curved doors instead of walls, By returning distorted images on their convex surfaces, they create a highly reflec-

tive screen to the rest of the house. A threshold of images masks their interior.

Six of the double doors are to bedrooms, and the other nine are to wardrobes, openable with matching doors on the interior of the room. From the corridor, the housekeeper returns laundered clothing. On the interior of the room the family member retrieves this, in a silent communication of doors and garments.

The wardrobes, containing clothing for covering the body, further encase the rooms and conceal them from the free-plan. Yet if inner and outer doors were open simultaneously, the room's interior would be suddenly visible to a passerby. New attitudes to clothing and morality were visible here in the domestic architecture. The constricting corset, popular until the first world war, had been replaced by looser layered clothing.[134] The doors – twenty-four in total – create an a layered opening and closing vertical layer. They softly define the interior rooms, in a play of privacy and interiority with the free (morally permissive) plan. Body and architecture clothe and reflect each other [Plates 57, 67].

Screen

The *Maison de Verre's* transparency is metaphorical rather than literal, revealed by its gynaecological intent and its domestic free plan. The building also suggests an overt yet erotic interest in hygiene, demonstrated by the quantity of 'sanitary' equipment in the

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[134] It was still thought clothing played a part in sexual hygiene Marie Schultz, *Hygiène générale de la femme: alimentation, vêtements, soins corporeal, d'après l' enseignement de pratique du Dr. Auvard* (Paris, 1903), 190–202.

house. In the 1930s, bathrooms were beginning to be promoted as separate clean spaces, yet practices of 'intimate hygiene' were not widely taught until late in the decade.[135] Despite the free plan and small number of habitable rooms, the house has no fewer than seventeen sinks or basins, three baths, a shower, six toilets and six bidets, in seventeen different enclosures. All for a family of four with just two live-in servants, thought to be a couple.

The bidet in particular was a new fixture in the bathroom, its use redefined from previously being associated with brothels and birth control. Frampton claims the bidet here is an example of 'metaphorical' '"functionalism"'. Their numbers signify 'an ironic profusion in the house of a gynaecologist'.[136] Cleanliness would have been important yet the number and positioning of these devices also links hygiene to pleasure. In certain medical and populist sexual health manuals, associations were made between hygiene and successful coitus and childbearing.[137] The washing facilities at the *Maison de Verre* are positioned as visible, freestanding elements in bedrooms, veiled by screens of perforated steel or glass lenses where a look can be stolen [figure 4.29]. The bidet's former association with the brothel, and this veiling and glancing intimates it as an item of eroticism as well as cleanliness.

Figure 4.29: *Maison de Verre*, screen to bathroom fittings in bedroom. Photograph Michael Carapetian, 1966.

[135] Calmard and Laurent, *Enseignement ménager: Hygiène. Puériculteur* (Paris, 1939), 9; Stewart, *For Health and Beauty* (2001), 67–68.

[136] Frampton, 'Maison de Verre' (1969), 80.

[137] Stewart, *For Health and Beauty* (2001), 101, 109; see for example, L. Mathé, *L' Enseignement de l'hygiène sexuelle à l'école* (Paris, 1912), 109, 14, 21.

Plates 50 67: Photographs of interior survey, 2008 2011.

50: Entrance.

Plate 51: Lens.

Plate 52: Bathroom.

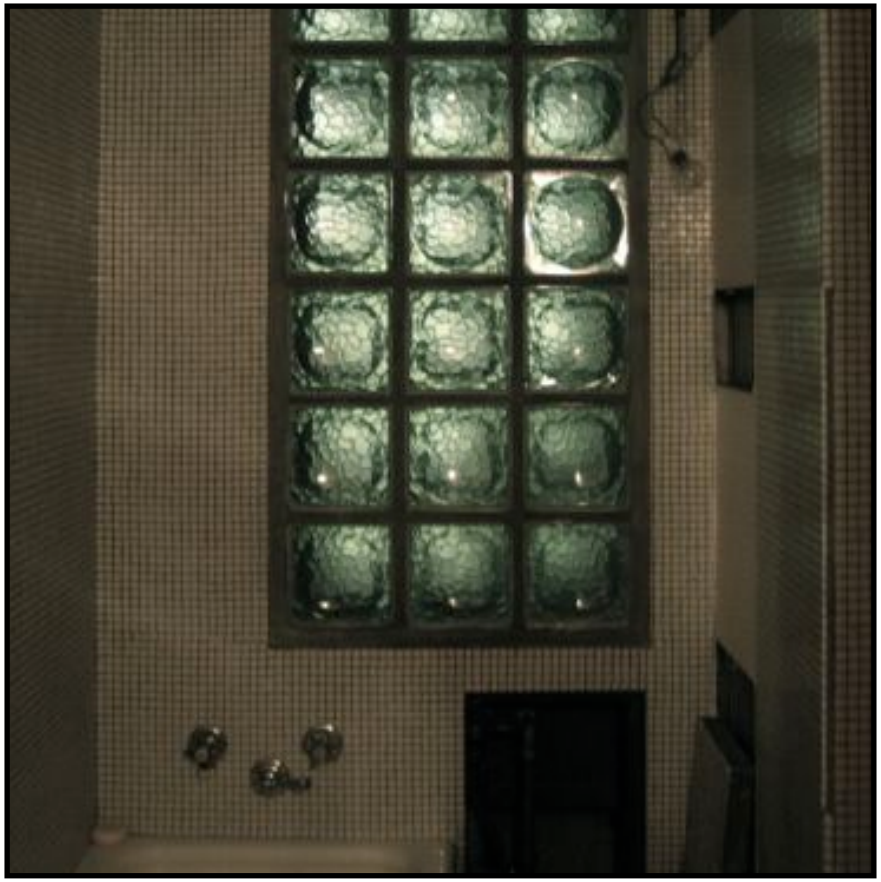

Plate 53: Clinic.

Plate 54: Doctor's Stair.

Plate 55: Clinic.

Plate 56: View From Waiting Room.

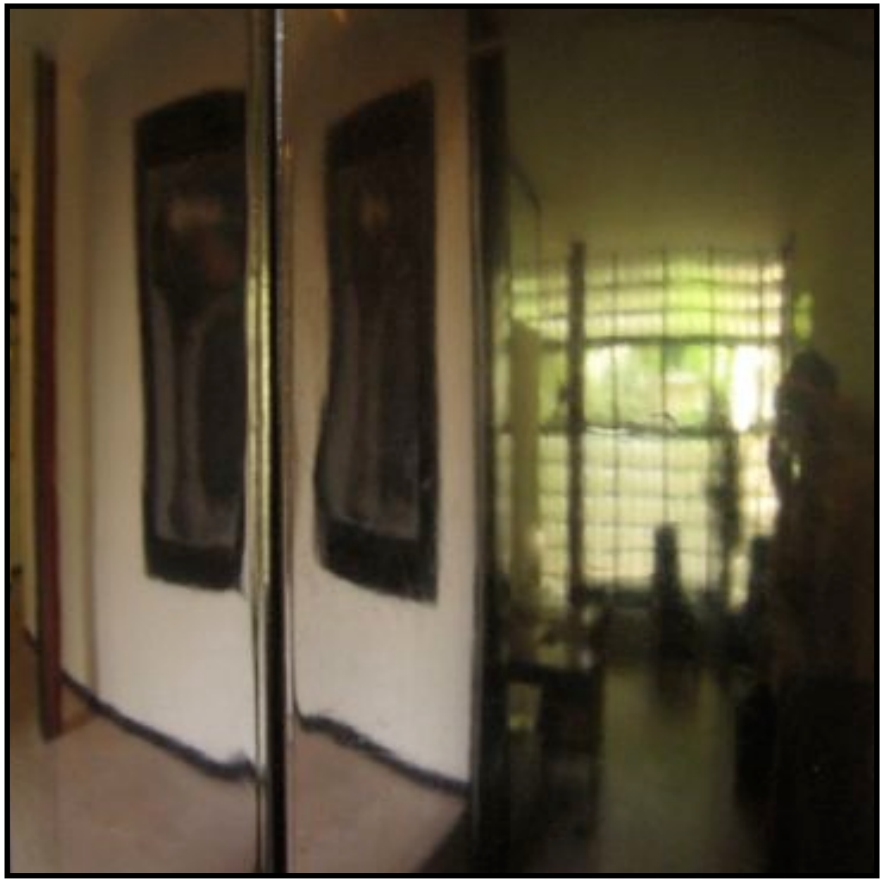

Plate 57: Bedroom Corridor.

Plate 58: Examination Room.

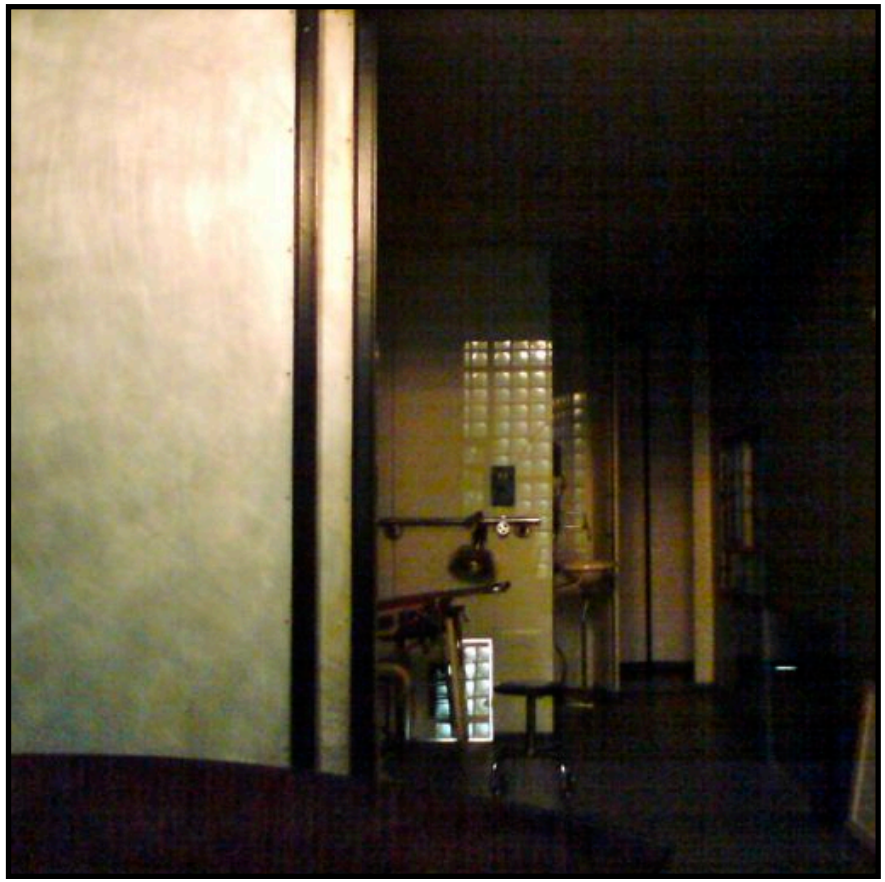

Plate 59: Lenses in Consultation Room.

Plate 60: Lenses in Consultation Room.

Plate 61: Surgery.

Plate 62: Doctor's Stair.

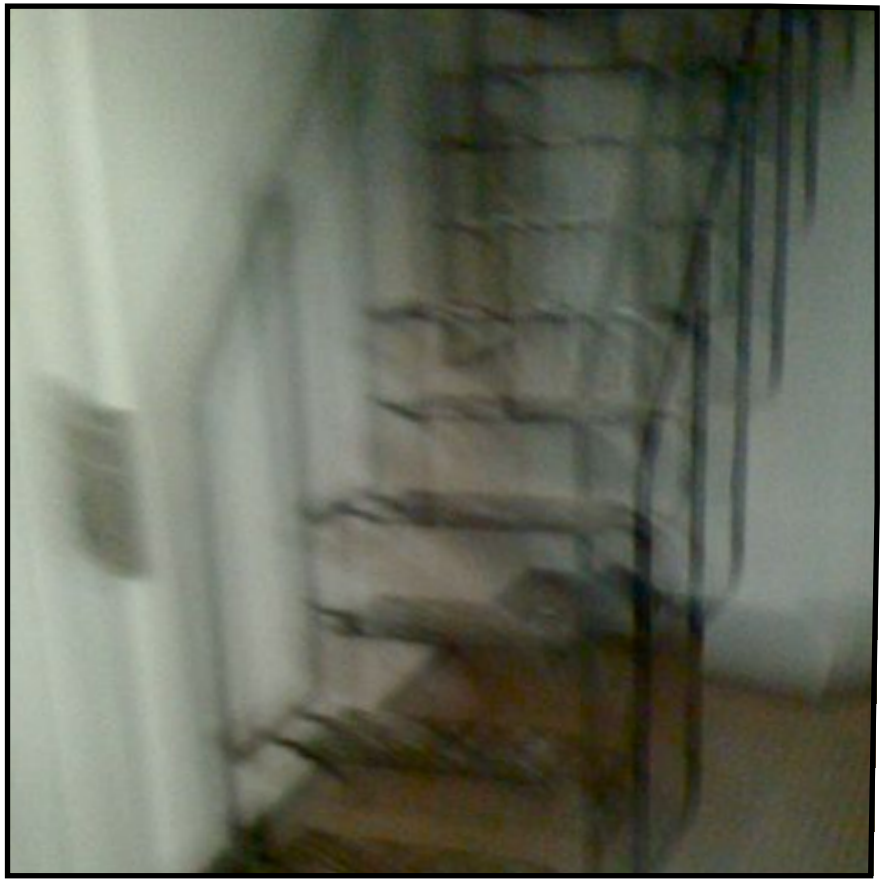

Plate 63: Mirror.

Plate 64: The Same Mirror.

Plate 65: Master Bathroom.

Plate 66: View into Winter Garden and Doctor's Office.

Plate 67: Bedroom Corridor.

Homeliness

To conclude 'Transparency', I look at the implications of understanding the *Large Glass* and the *Maison de Verre* as glass elements – shop window, vitrine, lens, mirror, screen. How do these come together? What kind of construction or space do they imply?

As we have seen, the *Large Glass* is a construction, materially and in detail like a part of an architecture. Through the window of its framed panes of glass we see the Bachelor perpetually grinding for his refreshed yet aloof Bride. If I read the flat plane of the glass as a section, it implies the projection of three or four spaces and planes for their protracted repeated interactions – a building of sorts, a house for a Bride and Bachelor, even, [Plates 33–36]. Compressed back into a window, this is an unfinished kind of architecture, without wall or room, as yet inhabitable, except in the mind [figure 4.30]. The Bride and Bachelor's inability to consummate reflects Duchamp's avoidance of setting up home. It remains the potential of a space, never completed and therefore unhomely.[138]

Frampton writes that, due to its 'highly upholstered interiors', and other nineteenth century ambiguities, the *Maison de Verre* was an 'anathema to the fresh-air and hygiene cult of the mainstream Modern Movement'.[139] He also claims it was excessively functional.[140] This leaves a contradictory image, of an

[138] The unhomely comes from Sigmund Freud, 'The Uncanny' [1919], in *Art and Literature: Jensen's Gradiva, Leonardo and Other Works,* (trans.) James Strachey (London: Penguin Books, 1990). I return to and expand upon its implications in the next chapter, 'Dust'. Arguably, the *Large Glass'* lack of completeness lead Duchamp to return to the themes and create, in secret, *Etant donnés*, 1946–66, a three dimensional, equally enigmatic, version of the *Large Glass.* I talk about *Étant donnés* in 'Dust'.

[139] Kenneth Frampton, 'Pierre Chareau. An Eclectic Architect', in Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 240.

[140] Frampton, 'Pierre Chareau' (1985), 242.

Figure 4.30: Marcel Duchamp, (**top**) *Cemetery of Liveries no. 1*, 1913; (**bottom**) *Plan of Bachelor Apparatus*, 1913. Philadelphia Museum of Art.

uncontrolled building, too historicist and homely to be a good example of modernism.

For me, the *Maison de Verre*, with its obsessive use of glass and steel and free plan, was clearly a modernist project.[141] I also argue that it fundamentally resisted homeliness in two ways. Firstly, as a gynaecologist, Dalsace's programme for the *Maison de Verre* was to promote a body for health and pleasure outside childbearing.[142] Perhaps pleasing to men like Duchamp, it also effected a sexual liberation for women. The clinic instated 'incompletion', allowing desire to remain fresh, unconsummated. The patient entering the building is restored to a form of, if not quite virginity, then seeming chastity. She may return to her unstated lover (the Bachelor) who remains outside in the city, enabling him to carry on grinding. The necessity of setting up home is avoided. The clinic's programme creates a space that is devoted to the body yet evasive of the domesticity linked to procreation.

Secondly, the rest of the building, the house surrounding and emanating from the clinic, challenges the ideals of home in several ways. The free-plan, in particular, is used to the extreme. Edges of spaces are indeterminate. Differently functioning rooms share details and materials as if 'living' is undifferentiated. Although some rooms can be labelled, they are fluid rather than enclosed and finished, the visitor's eye is lead away to another space from the one being occupied.

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[141] Bernard Bauchet writes that it is 'modern spatial design served by new technical solutions', Yukio Futagawa (ed.), Bernard Bauchet and Marc Vellay, *La Maison de Verre* (Tokyo: A.D.A. Edita, 1988), 6; Dominique Vellay emphasises how 'modern' her grandmother, Annie Dalsace was in Vellay, *La Maison de Verre* (2007), 9.

[142] Ironically, perhaps, Dalsace's son-in-law, Pierre Vellay, who later lived and worked in the house and clinic, was an obstetrician.

These spaces are composed of or interrupted by repeating or interchanging individual items. The concave glass lenses appear from almost every position; the ‘please touch’ request of the entrance bell is seen from the inside as well; the black and orange columns repeat throughout ground and first floor; bidets and basins, switches and wheels are profuse. Other parts appear dislocated: curved walls, sliding screens, perforated metal planes, glass lensed panels, the delicate hanging staircase to Dalsace’s office. Enclosure erupts, column becomes mirror, wall becomes window, cupboard wall. Doors and windows reflect and blur. Apparitions are created.

This is a strange, relentless interior. Like no other contemporaneous building it is made of unconsummated parts (apparitions even, as the gynaecological instruments suggest). However carefully and specifically these were placed by Chareau for the Dalsaces, the parts overlap and inform each other, through the experience of the viewer. Like the *Large Glass* and the framing of part-architecture, though, they never quite finish. Rotation begins again. The specifics of the architecture perpetuate a space between home and not home, resulting in an unhomely domesticity, of parts and suggested parts, incomplete spaces and definitions.

Plates 68: Interior survey, 2008 2011.

Plate 69: *Redoubling the* Maison de Verre*: Research as Vitrine*, 2010.

The back wall of the vitrine is lined with mirror, the front is a screen of perspex etched with the façade of the *Maison de Verre* and a strip of city map locating the building. The interior is fragmented into views of the interior, with gynaecological objects suspended on perspex discs and held by invisible wires. The mirror reveals, doubles and occludes the interior.

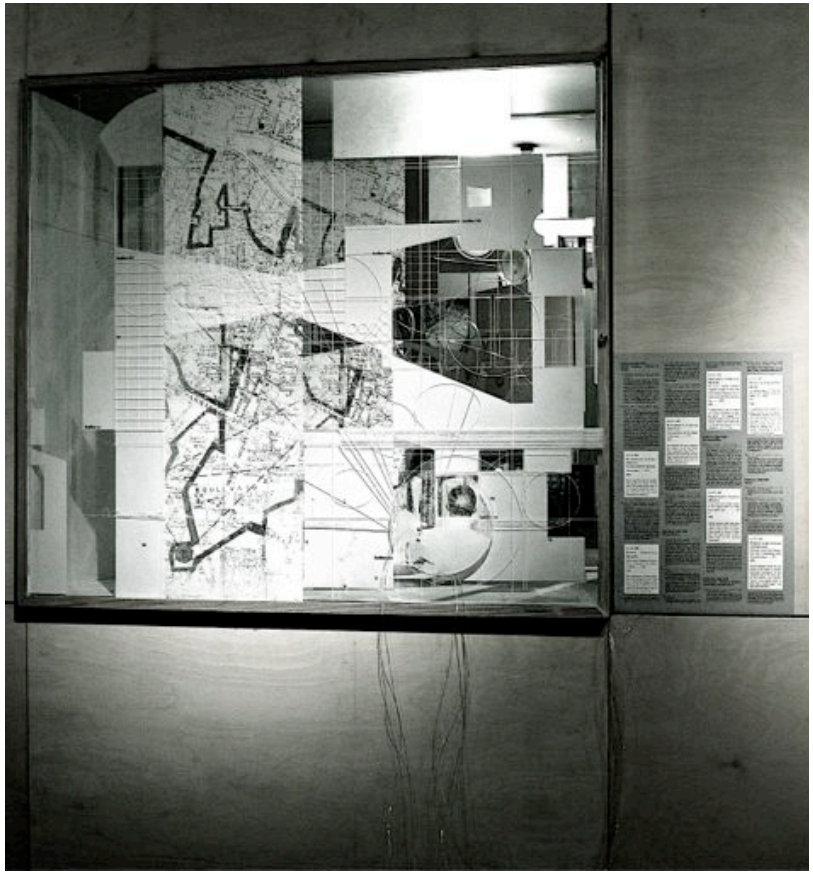
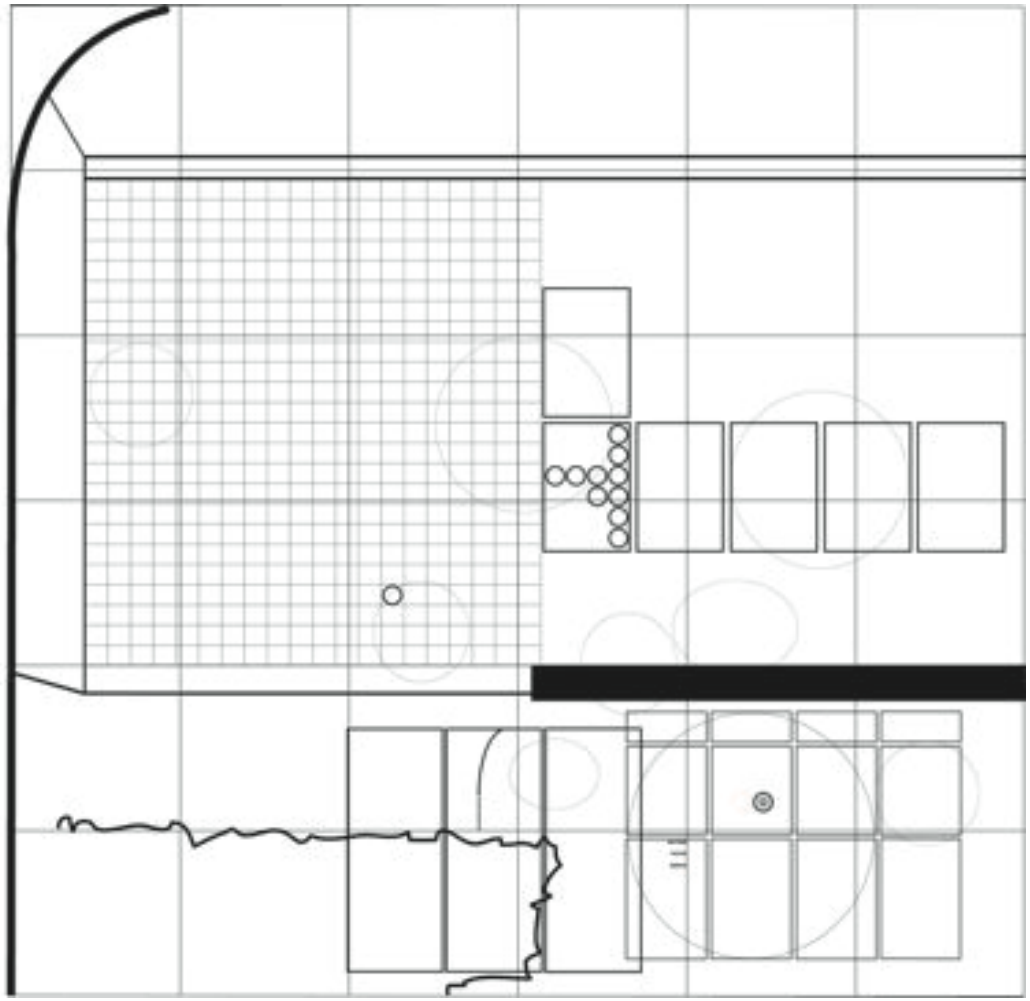
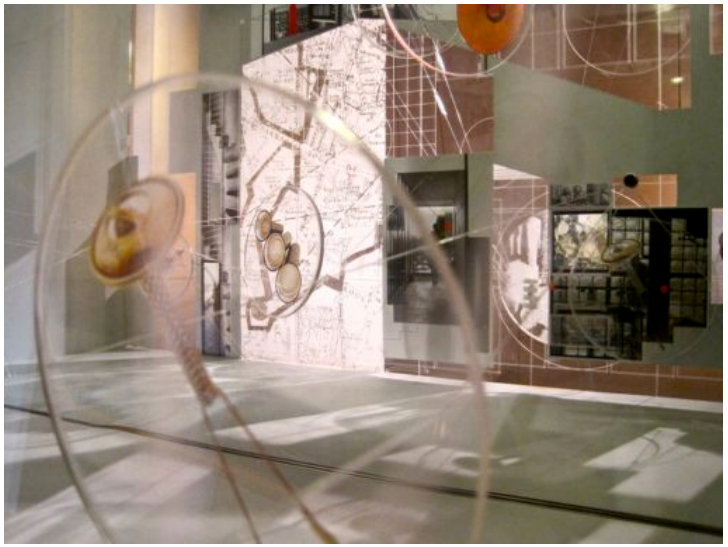
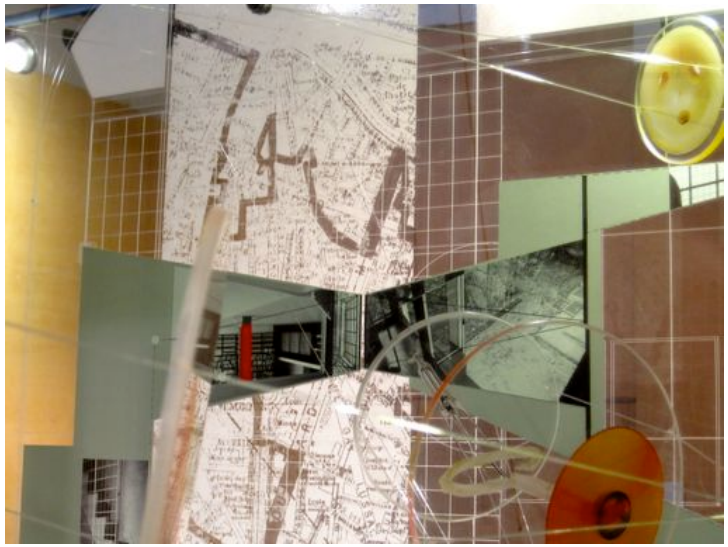


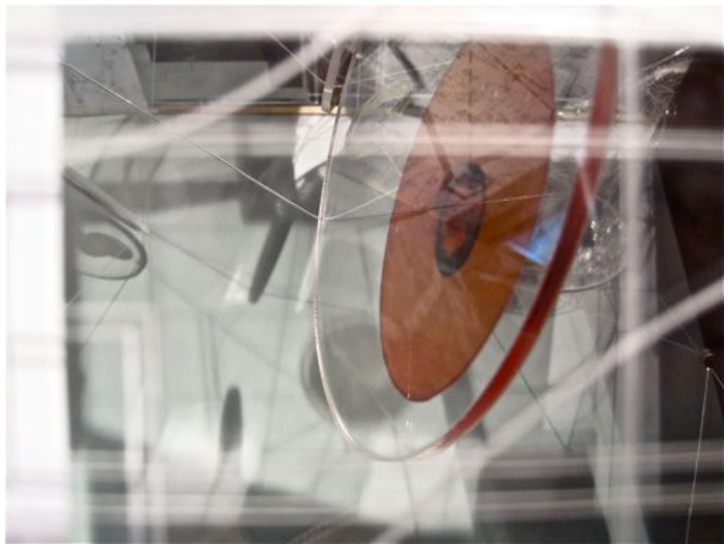
Plate 70: *Redoubling the* Maison de Verre*: Research as Vitrine*. 2010, drawing of front screen of perspex to be etched with the façade of the *Maison de Verre*.



Plates 71: *Redoubling the* Maison de Verre, *Vitrine details*, 2010.
Etched perspex, paper, mirror, perspex discs with Safmat images, light, fishing line, electrical fittings, screws.







Plates 72: *Redoubling the* Maison de Verre, *Viewing into the vitrine*, 2010.

Section a-a/ 1:50/ 1932
Exterior Courtyard - Entrance to Surgery

1. Junction between 18th century cityscape and steel framed free façade.
Leaving the street along the entrance passageway I face a wall of glowing glass contained by a black grid. This is not the house but its mask, repelling and beckoning at the same time. There is no front door. The bells are on a post. I press the one marked *DOCTEUR* and hear a bell ring somewhere. I look around, worried about the illegality of what I need. A young women looks back from a slit of window to the side and the door opens.

2. Plate glass steel framed doors. Exterior flooring of white pirelli rubber.
Entry is a covert slippage between outside and in. I pass through layers of glass like veils. The passageway is darker than expected, the light coming from elsewhere and the only thing to do is move swiftly through to the black shiny door at the end. The rest of the house appears as slices of repeating fragments: the skinny black hanging staircase, the curving layering reflecting screens hiding the main stair. I turn toward the waiting area to be confronted by a square mirror planted on the orange and black column. As I move forward I see my groin area reflected. A huge portrait of Annie is to the right. I float down two steps and am faced by my face framed in the same mirror.

3. Full height wired rough-cast glass screen along length of corridor.
If you were watching, the patient would disappear, seemingly slipping right out of the building as she enters the doctor's consulting room. She probably won't but if she were to turn around at this point, and glance upwards she would see the shadowed face of Mme Dalsace looking down, perhaps. Her exit and entry into the suite of surgical rooms can be overseen, although her identity is hard to distinguish. The base of the doctor's stair is to the right again. The stair is a hard black metal vertiginous tortuous piece of furniture rising through a dark slot in the ceiling.

LOT B/..686

BOSSI CERVICAL DILATOR

Italian maker Guiseppe Opezzo, a fine example in mint condition.....12 F

1880.

This instrument is used to dilate the cervix in labour. As the wing nut is turned the dilation of the cervix may be measured on the scale. The disadvantage is that it may cause the cervix to tear.

4. Entrance corridor to servants' quarter, along plate glass inner wall.
I sit in the waiting room. From here I can look along the inside back wall of the house and the other way to the main stair floating into the light. I am at the back of the house. Although I have not left the ground I am light and queasy again. The front wall of glass is repeated softly. Time stops and I am delayed between the two planes of light.

6. Wired rough-cast glass opening air vent to inner layer of front façade.
The back wall though is not quite the same as the front, as it is lined with orangey red mechanistic stripes of steel and window opening devices. Angry red harsh machinery, like an ugly factory. Having been folded in she enters the body of the building via a central corridor. The corridor is darker than expected, though flanked with a cast glass screen to the left. The corridor goes towards an open full height valve like door. Through the open door ahead she can see straight through the whole house to the garden. The combination of strong light and the view to the outside gives her the impression that she is not contained inside at all. The internal back wall of the house is a repetition of the front with a sharp strip of clear glazing set in the soft diffuse lensed panels. This repetition renders its wholeness as an object inaccessible.

LOT D/..890

FERGUSSON'S VAGINAL SPECULA

A very rare set of nested specula. In the original fitted red velvet lined leather case.....25 F

1900.

Tubular specula made from glass with the inner surface mirrored to reflect as much light as possible. Outer surface is covered in black gum. The fragile nature of these pieces mean very few survived undamaged.

7. White pirelli flooring throughout ground floor. Black lacquered door to end of corridor.
The patient never really enters the house, she is caught, delayed, suspended and fragmented between the two similar planes. The house alludes interiority. I was utterly moved and unable to think when I entered this room again. The glass as a material is both soft and pulpy, like jelly or thick like sea water. It is both safe within the glass yet one recognises the psychological exposure the glass enables. You are nether inside nor out.

Section b-b/ 1:50/ 1935
Master Bathroom

8. Perforated steel screen shutters between bath and shower.
We have disagreed this morning and taken breakfast separately. I will only communicate with him through brief notes whilst I compose myself. I know he will see the patient against my wishes. There is nothing I can do about that except withdraw pleasure in the meantime. I take my bath as usual, but close the shutters against him. I can hear him showering in the adjacent space, but he is denied seeing me.

9. White glass mosaic tiles to column.
The disagreement will last all day until after I have examined Madamoiselle Reynolds. Then it will be forgotten or I shall smooth it over. In the meantime she closes the screens against me. We normally take our ablutions together, me showering while she bathes. I can still see her shadowed curves through the screen backlit through the glass; does she know I can see her?

10. Glazing beyond creating backlight.
Does she recognise how tantalising, how challenging the view is? I think not, but then our love making is always improved after such a day of veils and disagreements.

LOT E/..897

PUST'S CONTRACEPTIVE DEVICE

An antique signed Dr Pust; box with its two original instruction leaflets in German.....4/6

1926.

A contraceptive device made of a glass button or an iodine impregnated celluloid cap, with a line and second coil of silk windings attached. Does not prevent normal periods and should be changed every 3 to 4 months. Disadvantage of use can be infection and expulsion.

Veil

Surveying a building is a necessary practice of the architect. It is how I initially researched the *Maison de Verre*: measuring, counting, identifying the materials of the architecture as physical objects. This method though, is an exteriosed one which overlooks spatial interactions, narratives and movements. After surveying, I took a different approach, making spatial interpretations which imagine different historical narrative occupations of the building.

For Frampton it appears to be the glass in the end which undermines a clear definition of the *Maison de Verre*. Although he approves of the revelatory aspects of the house, (the façade, remember, 'simulates a quality of illumination comparable to that experienced in the open air'[143]), he levies, to repeat, that the *Maison de Verre*, and the *Large Glass*, 'were based on an obsessional and superfluous use of glass', which one would mistrust. The building's 'continuous translucent covering […] does away with [the] counterpoint between solid and void' of modernity.[144] The continuous glass then unsettles modernist dichotomies of solid/void, inside/out, public/private. I argue that it is the medium of glass though, in the context of home and sexuality, that brings depth, complexity and ambiguity to both the *Large Glass* and the *Maison de Verre* – without it they would be merely ordinary.

Transparency's other is its translucency. They are not simply oppositional but coexistent. In the *Maison de Verre*, glass is used as both a sign of early twen-

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[143] Frampton, 'Maison de Verre', (1966), 259.

[144] Frampton, 'Pierre Chareau' (1985), 242–243.

tieth century desire for openness and clarity, and as a mask to the concurrent counter context of deep conservatism and repression surrounding matters of sexuality. The stringent laws of 1920 and 1923 reinstating procreative imperatives discussed in 'Background' gave the Dalsaces cause to obscure the building's activities. Translucency veils the gynaecology clinic both from the family home, and to the outside world.[145] The translucent unhomely expansive nature of the glass, its familiar unfamiliarity, is its potential.

The *Large Glass* also complicates transparency. Duchamp's message on the glass was not simply against marriage but in pursuit of an alternative. Talking about his interest in eroticism, he states he wants to bring out into: 'the daylight things that are constantly hidden – and that aren't necessarily erotic – because of the Catholic religion, because of social rules. To be able to reveal them, and to place them at everyone's disposal – I think this is important because it's the basis of everything, and no one talks about it.'[146]

If Duchamp's aim was to make things otherwise hidden transparent on the clear glass, the glass is the mediating plane, the frame through which events unfolding have yet to occur – a pause. Yet, Duchamp's critique of cultural mores was not clear. The next frame of the narrative is ambiguous. Although seemingly transparent the glass becomes translucent, opaque even.

For me this is demonstrated by the depiction of the Bride, who resides between presence and absence. Duchamp writes that he wanted to: 'Perhaps use a *less transparent* (ground glass or oiled paper or varnish on glass) allowing a provisional *opacity* made by the splashes from upstream and down. [for the top

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[145] Although avant-garde Saint Germain was a refined district of Paris.

[146] Cabanne, *Dialogues with Marcel Duchamp* (1987), 88.

"Inscription"] blossoming.'[147] He explains her projection onto the glass in three dimensions from the fourth dimension, or through the glass into the fourth dimension. Between appearance and disappearance: a cinematic apparition.[148] In opposition to his suggestion of her elsewhere as cold, preening, she is an erotic ghost, her blossoming a flow of cloudy, airy fluid. Caught in the process of forming between virgin and apparition, she remains a question.

The unhomely translucency of the *Maison de Verre*, denying categorisation, results in what I would call an erotics of architecture. When inside the building, glass infiltrates every aspect of the architecture, creating a kind of labyrinthine spatiality. The translucent lens is the motif of ambiguity. Objects, bodies and details are read against and through it, its signification of Dalsace's practice permeating the house. And close to, peering, the eye is effectively blinded or trapped inside it [Plate 74]. The flecks and cracks in the glass (which appeared a decade after its completion) create a conflict of materiality and immateriality, forming new surfaces, other lenses, within the depth of the original, which almost appear to give a view, at an angle to the outer faceted surface. The interior portions of lensed wall, where the lens is inside out, mimic the ambiguous parts of the body, the lips, the vulva, the anus, the ear, where exterior skin transforms and turns into the inside. At times, experiencing the building causes the eye to be reincorporated back into body, folded into the carnal through the glass.

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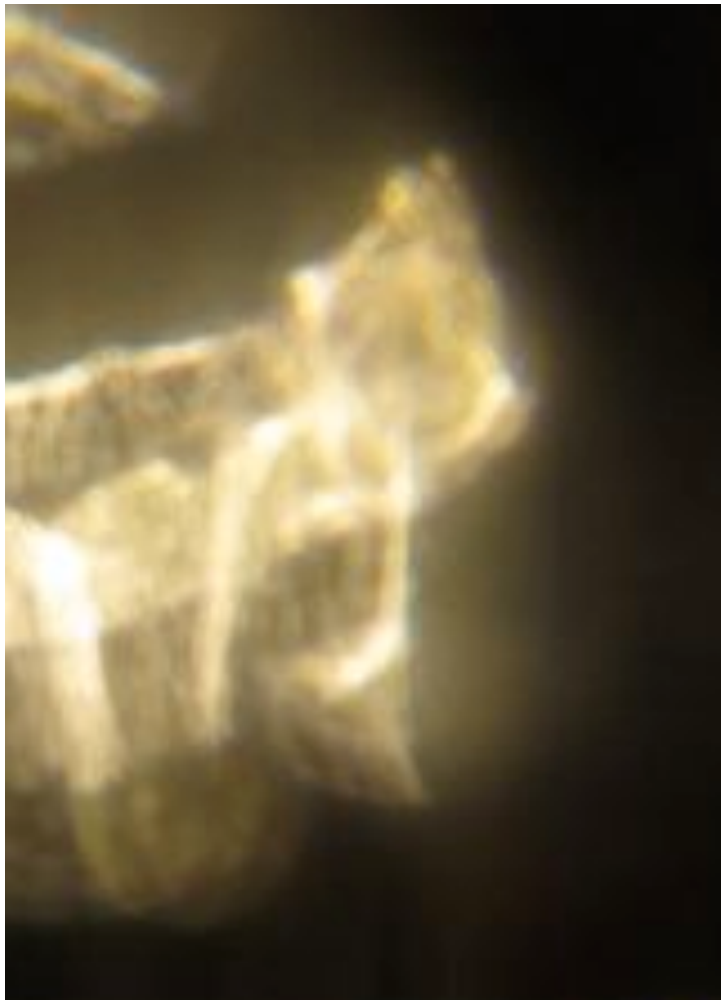
[147] Duchamp, 'The Green Box' (1973), 38. My italics.

[148] Duchamp, 'The Green Box' (1973), 42.

Plates 74: *Through a lens darkly*, 2010.



Immaterial Survey

Started as notations on the building whilst I was in residence, the following pieces of writing interpret the translucency of the building. In the process, building and text merge, the fabric of the building becomes a narrative reading of history through three projects, ‘Convolutions’, ‘Cuts’ and ‘Slips’. ‘Convolutions’ describes the possible inhabitations as promenades. In ‘Cuts’ these are exposed, or opened with views. Finally, ‘Slips’, explores parts of the *Maison de Verre* which conjoin building material with the relations of bodies. The text is a fictional interpretation with a cast of ‘protagonists’ and, therefore, appears in Didot font.

Cuts, Convolutions and Slips

Protagonists

The Salon Visitor
One of the (male) friends, intellectuals, or activists visiting the weekly salon, he is also a friend of Madame Dalsace. At times I hint that this character might be Marcel Duchamp. I have no evidence to back up the belief that he visited, but as he moved in the same circles as many of the regular Salon visitors, particularly André Breton, Louis Aragon, Paul Éluard and Jean Cocteau, it is possible.

The Doctor
Jean Dalsace, gynaecologist.

The Patient
Visiting the clinic, she is based on Marcel Duchamp's lover from 1923 1941, Mary Reynolds. A bookbinder, she died from uterine cancer in September 1950. Again I have no proof that she visited the house or clinic. The possibility of this is further explored in the text of my chapter 'Dust'.

Madame
Annie Dalsace.

Housekeeper
The housekeeper is an unknown character. She is thought to have lived in the servant quarters, and been the main cleaner of the house. She becomes the narrator of the fictions in 'Dust'.

[In architecture history and theory writing description is commonly in the present tense, describing its current presence as if there is no past life to a building. Here, instead, past events are reclaimed in the present.]

Convolutions

Responding to the unfinished nature of Benjamin's *The Arcades Project*, Theodor Adorno applied the word *konvolut* to the sections. In German the word denotes a 'larger or smaller assemblage – literally, a bundle – of manuscripts or printed materials that belong together. […] it remains the most precise and most evocative term for designating the elaborately intertwined collections of "notes and materials" [of Benjamin's text].'[1] The translator's notes acknowledge that in English the noun 'convolute' has a different connotation, as something coiled or twisted in form, difficult or complex to understand. A convolution as a coil implies parts come into touch with each other and create new interpretations. To understand or unravel it, physical movement through the material is required.

The free-plan, instigated by the columnar structure and floating plane of glass, was heralded as a new and revelatory alternative to the bourgeois home of the previous century. It could be seen as the 'enemy of secrets'.[2] At the *Maison de Verre*, the free-plan was a ruse which organised the intertwined convolutions of medical practices with social and marital relations, allowing them to coexist.

I generate a new plan of the *Maison de Verre* by imagining its different overlapping inhabitations by [Plates 75–77]. I map circulations around the practices of gynaecology and domesticity. Promenades spiral and zigzag through the free-plan of the building. The transparent or translucent glass becomes an agent for tensions between privacy, obscurity, sexuality or visuality experienced by the building's protagonists.

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[1] Benjamin, *The Arcades Project* (2002), xiv. According to Howard Eiland and Kevin McLaughlin, Adorno used the term when he retrieved Benjamin's manuscript in 1947 – after the Second World War and Benjamin's death – from the Bilbliotèque Nationale de France, where it had been hidden by Georges Bataille.

[2] See Benjamin, 'Experience and Poverty' (1999), 734.

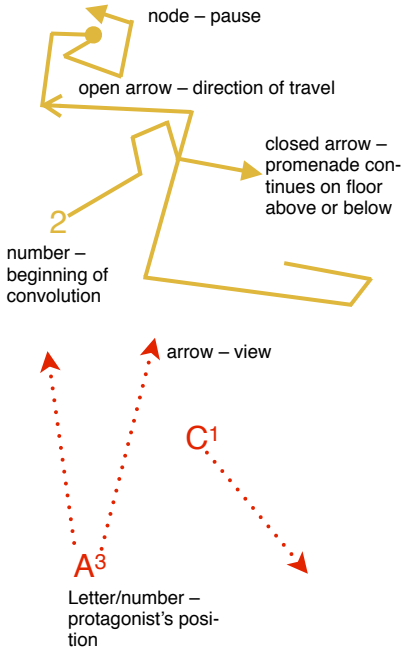
Plates 75–77: New plans of the *Maison de Verre* through its convolutions, cuts and slips, 2010.

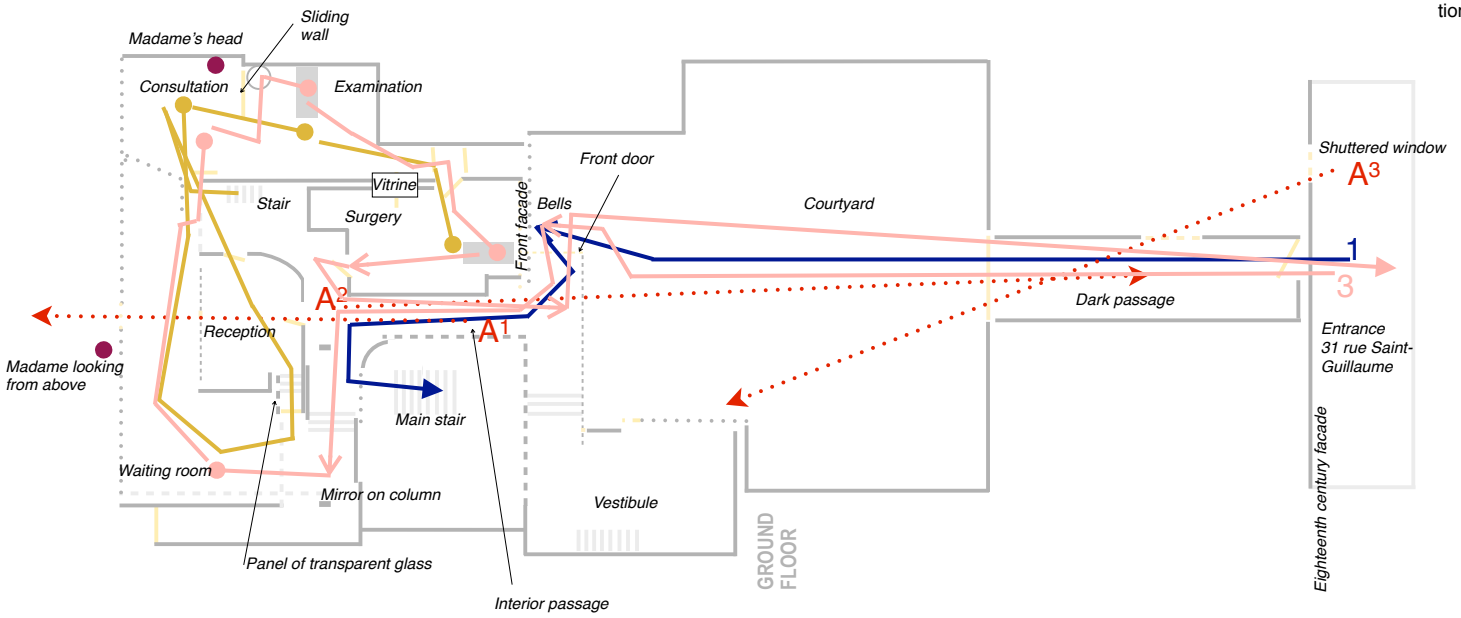
Key

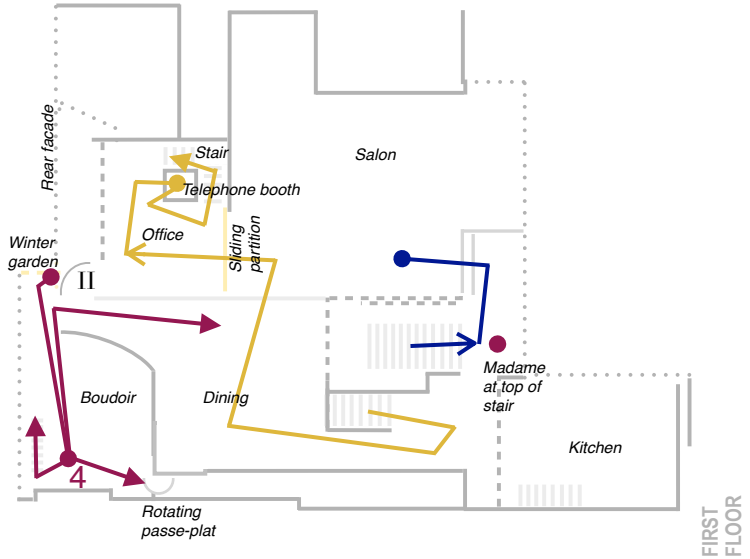
Convolutions:
1 Salon Visitor
2 Doctor
3 Patient
4 Madame

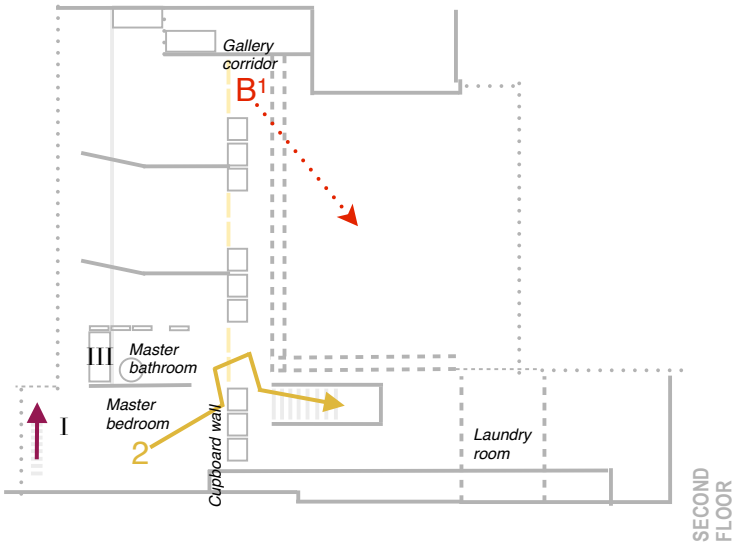
Cuts:
A¹ Patient looking in
A² Patient looking out
A³ Patient looking from street
B¹ Daughter

Slips:
I Bedroom
II Boudoir
III Bathroom






Rear façade
Stair
Salon
Telephone booth
Office
Sliding partition
Winter garden
II
Madame at top of stair
Boudoir
Dining
Kitchen
4
Rotating passe-plat
FIRST FLOOR


Gallery corridor
B1
III
Master bathroom
Master bedroom
I
2
Cupboard wall
Laundry room
SECOND FLOOR

1 [midnight blue] The Salon Visitor

The visitor enters 31 rue Saint-Guillaume from the street, walking along a passage into a courtyard. It is dusk. The upper portion of the façade, composed entirely from 'Nevada' lenses contains the *salon*. It is lit, revealing silhouetted grainy outlines of the piano and people moving around. The power of this image, and his proximity to it, its soft detail played out in the repetition of the gridded glass lenses, is a recognition, a confrontation. The exterior spotlights flick on, lighting this interior from outside. He moves forward to the entrance and pushes the bell marked *Visites*. The plate glass here allows views into the interior of the building unafforded by day. He enters briskly. Met by Dr Dalsace he is guided in along the interior passage. At ground floor level, the full height doors to the rest of the interior are closed and shining darkly, reflecting the glass as a distorted grid. He knows this is the clinic, but cannot quite see it in the subdued shaky light.

Light is coming from above and behind him. He is turned to the left to the base of the main stair, through the open perforated screens and ascends floating concrete treads towards the light. He hears piano music. Before him at the top of the stair, in almost complete silhouette, lit from behind, stands a woman Madame Dalsace greeting visitors.[3] Like an image projected, her shadow falls down on to the stair treads. A cinematic apparition in the fourth dimension.[4] Taking in this sight he is, for a moment,

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[3] Vellay, *La Maison de Verre* (2007), 24.

[4] Duchamp, 'The Green Box' (1973), 42.

caught hanging vertically between the two floors, cut in two by the horizontal line of the floor slab [figure 4.30 and Plate 78]. His view, hovering between the floors, takes in the low light of the courtyard below and the fractured light coming through the lenses above.

Reaching the first floor, he is struck by the uncompromising extent and fragility of the glass wall. With no views out, no transparency or reflection, it sits between the opacity of the past and the transparency of the future. Its repetitive glass vertical surface is soft in form yet thin and brittle. Oscillating between part and whole, it fragments and blurs the visitor into each faceted translucency. He turns away to the left again and up two more steps into the salon proper a great double height space, a stage[5] filled with light, music, art and companionship.

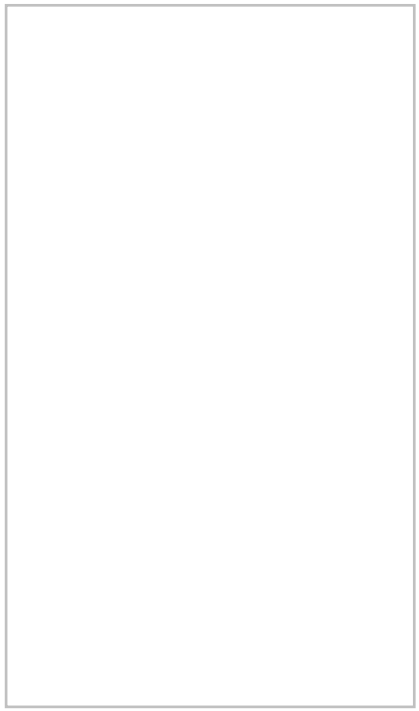
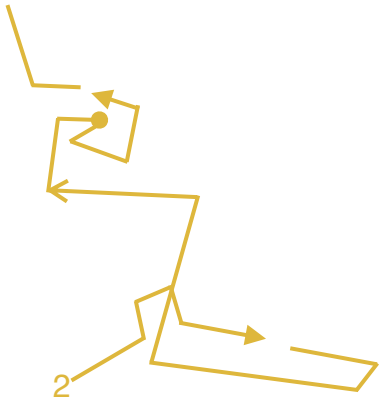


Figure 4.31: *Maison de Verre*. Rising up the main stair to the salon. Photograph Yukio Futagawa.

[5] Vellay, *La Maison de Verre* (2007), 52.

Plates 78: Ascending the staircase into the salon, 2010.

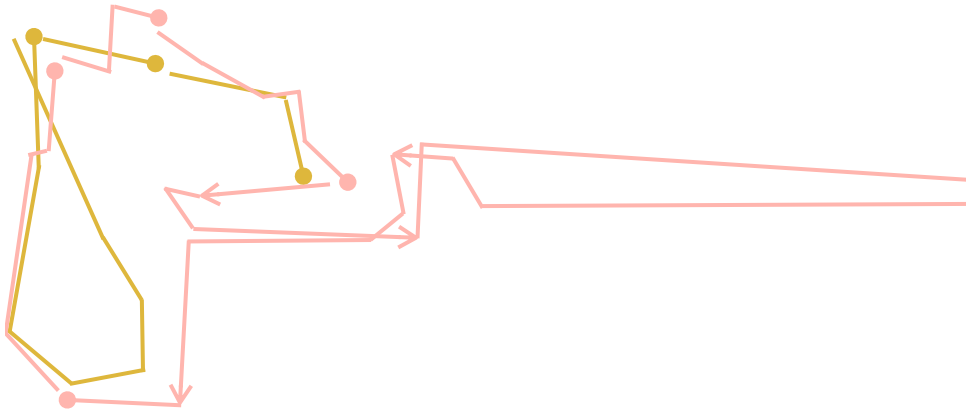


2 [gold] **The Doctor**

The doctor wakes next to his wife in the second floor master bedroom. An early, dim light enters through transparent glazing to the garden wall. He retrieves his clothing from the inner curve of the cupboard, descends a level, and takes breakfast in the dining room. The light from the glass lenses at the front of the building is growing stronger. He withdraws sideways into his office, sliding the heavy, soundproofed partition closed behind him. Private, there are no views to distract him from his work. Light softly penetrates through the rear façade of lenses beyond. He withdraws further into a completely enclosed telephone booth, also soundproofed, to make discrete calls to his patients. His wife's *boudoir* (dayroom) is adjacent, with its little *jardin d'hiver* (winter-garden) jutting out to the side, visually connecting the two.

When ready to receive patients, he descends a black steel stair behind the telephone booth to the ground floor. The slim circular sections and flat flanges are welded and bolted together, to make a vertiginous descent through a dark slot in the ceiling [Plate 62]. For use by the doctor alone, it is steep, and must be tackled with an upright posture. The grating treads can be removed, for privacy as much as cleaning purposes. At the

base, the doctor spins to the right to enter his clinical suite, separated from the domestic and public spaces. From here he starts a new sequence, interfacing with his patients.



3 [flesh] The Patient

The patient's sequence begins in the city. The *Maison de Verre* is invisible to the street. An unbroken façade of eighteenth *hôtel particuliers* gives little clue to, protects even, the spaces beyond. Occasionally one of the pairs of large wooden doors opens and someone slips in or out. At number 31, the windows are shuttered, with no views into apartment interiors. Having dithered, she finally enters through the right hand of the green doors into a dark single storey passage about ten metres long, to face the soft glass façade framed by the end of the passage.

Emerging into the courtyard, the building appears to her an incomplete form. She sees that the lensed part is floating above the ground floor. The left half of the ground floor level is glazed instead with clear plate glass. The right is set back and consists of glass lenses like the upper floor. She approaches the transparent glass, thinking it might be the entrance, but it is so reflective that she only sees her own image bounced back onto the mirrored view of the passageway she has just emerged from. Further layers of other glass walls disappearing inside contribute to the quality of veiling and reflectivity. Al-

though made of little other than glass, concrete mortar and narrow steel framing the front is so layered at ground floor and translucent at first floor that the play of privacy and secrecy that begins on the street is extended onto this first skin of the building. The translucent lenses seem too stippled, dusty and distorting to be right in this context.

The entrance door is hidden, perpendicular to and connecting the two lower planes of façade. A black post displays three bells. She pushes one marked 'Docteur', thinking of others who have done so before. The house and its unseen housekeeper standing silently in the servant wing on the second floor are alerted to her presence through its distinct ring.[6]

She enters through clear glass. Folded in between the layers of façade, the reflectivity is gone. She turns right, through a sliding door of translucent rough-cast wired glass, into the body of the building. The corridor is darker than expected, flanked with similar glass to the left, repeating the materiality and rhythm of the sliding door she has just come through. Beyond its pitted textured surface a stair rises in the opposite direction. The solid walls to her right and ahead are white. Towards the reception she sees, to the right, a hanging, pendulous staircase throwing a shadowy plan of itself onto the wall. A valve-like door ahead of her is slick with black lacquer and highly reflective. As she approaches a distorted version of her body appears.

The receptionist greets and directs her, not through the reception toward a view of the garden, but away to the left, further into the interior of the building. As she turns, passing a column almost blocking her way, she sees the main stair rise back towards the front of the house. Inaccessible, closed to her, a strong light from above is reduced to dots through the perforations of grey, ghostly curving screens. She continues forward, toward a mirror mounted on the orange inner flanges of another column. She tries not to look

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[6] Vellay, *La Maison de Verre* (2007), 7.

at the framed image of her crotch area. Down several steps, she sees her face in the same mirror. She escapes through a concertinaed stiff fabric screen into a space encased by soft lenses, cut with a sharp horizontal strip of clear glazing onto the garden. Lower than the ground, now seated in a leather chair, she is sunk against the diffuseness of the lensed panels, with only the sky visible. She waits, looking along the length of this glass back wall protected by an inner layer of orange mechanistic spikiness. Glancing the other way, as the fabric screen is closed around her, she can see back through to the main stair and an adjacent set of closed black shiny curved valve-like doors. The stair floats, not quite attached to the floor.

She is caught, delayed, suspended between the two similar planes. She is hidden, removed from the city and its cultural constraints. Yet, the house eludes interiority with no clearly defined edges, a reversing of the nineteenth century interior. A sequence of spaces rather than rooms spill through the ground floor, temporarily enclosed by screen or reflection. Each space exchanges fragments of another, undermining viewpoint, picture plane and horizon. She has no fixed views of the spaces and it appears to her that she is floating horizontally through the building as a projection of her own narrative. Her reflection and shadow double and disappear. No point of reference can be located, and the rest of the house remains allusive, leaving her with herself the only object.

Sitting in the waiting room, the flank of the receptionist room appears to float. Disorientated by the experience of glass and light cut through by dark reflection, she watches a second black lacquered door, with a panel of transparent glass, at a right angle, to the left of it.

She does not yet know that she will meet the doctor at this second lacquered door. Eventually, he appears. He has walked from his consulting office through the receptionists office. Having collected information from the receptionist, he leaves the room down its internal steps to the black valve door. She sees him on the panel of glass, framed and

captured moving across and down it all lines and reflections as he descends, like Duchamp's 1912 *Nu descendant l'escalier n° 2* [figure 4.31]. This image forewarns her of his imminent arrival through the black door. Once they have met they rotate together through the rest of the sequence. The patient, no longer alone, follows the doctor, not back through the reception room, but along the inside back wall of the house. Just before they enter the consulting room, passing to the right of an internal fold of the lensed back wall, she sees the thin black stair rising to the right.

The consulting room is a sudden double height space with a wall of lenses diffusing light, and two transparent glass doors open onto the garden. The doctor moves towards the open doors and sits down with his back to their light, his face in silhouette. She sits opposite him for their discussion and remains uncertain of his expression. To continue the spiral toward the front of the building, she is directed through a large duralumin sliding wall to the only completely internal room of this floor the examination room a stripped white shiny space with no natural light and a drop of ceiling. She undresses in a circular booth, warm air drifting up through the heating vent. Naked, she is reassured

Figure 4.32: Marcel Duchamp, *Nu descendant l'escalier n° 2* 1912. Philadelphia Museum of Art, Philadelphia.

when a nurse appears.[7] The doctor examines her standing first, then reclining on the table.[8] Her feet in stirrups, the light turned into her.

For her surgery she is directed further in, past a double sided surgical vitrine on the right, lit from beyond and filled with the shadowy shape of instruments, through a tiny vestibule with white painted valve doors into the surgical room. She is amazed to see again a wall of lensed glass panels. She can see out at clerestory level and from the view and light diffusing in she has the sudden recognition that this is the front façade of the building facing the entrance courtyard.

After the operation there is another surprise for the patient. Once clothed she is turned back into the middle of the building. Instead of completing her route by leaving the surgery at the front, to recover her location, the door from the surgical room is at the inner end. Having exposed her to the front, the building pretends it has done no such thing by

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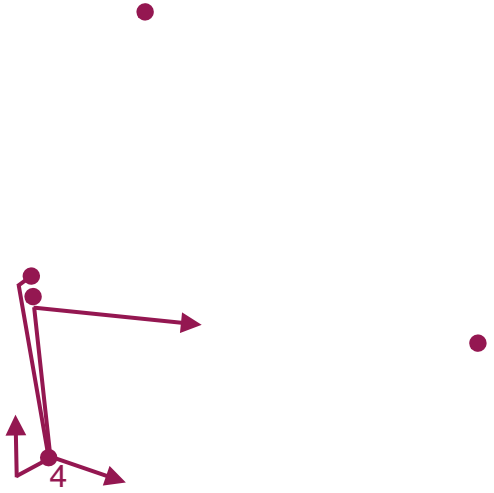
[7] The (female) nurse at the gynaecological examination, not only plays a practical role, but dilutes the potential for sexual tension between the doctor and patient. See Joan P. Emerson 'Behaviour in Private Places: Sustaining Definitions of Reality in Gynaecological Examinations', in Hans Peter Dreitzel (ed.) *Recent Sociology No. 2* (London Macmillan, 1970), 74–97.

[8] According to the docent at the *Maison de Verre*, Mary Johnson, it is customary in France to be examined in a gynaecological and obstetric examination firstly naked and standing. I cannot find concurrence on this practice in the 1930s though. Anne-Marie Sohn asserts that most women preferred to have sexual intercourse in the dark at this time, see Anne-Marie Sohn, *Du premier baiser à l'alcôve: la sexualité des Français au quotidien, 1850-1950* (Paris, 1996), 281. Other writers suggest that uneducated women would baulk at another woman seeing their genitalia, see Louise Weiss, *Mémoires d'une Européenne. 1. 1893–1919* (Paris, 1968), 184. Contemporary gynaecological handbooks though do show the body naked in a variety of positions to aid the examination, see, for example, Hartmann, *Gynécologie Opératoire* (1911), 8, 12, 17, 18. He emphasises the necessity of a physical examination for diagnosis of ailment, 6. The final position illustrated, the *Position génu-pectorale*, shows a woman is kneeling on her front leaning forward onto her arms with her bottom in the air. It is accompanied by the commentary: 'the unfolded vagina, following the entry of air, can be easily examined in all its parts as long as one has adequate lighting' (my translation), 18.

returning her into its very inner core. To exit, she must double back down the first corridor to the entrance. On finally leaving she passes directly the very same operating space with an uncanny sense of recognition, the silhouette of the equipment in her mind; but with a confused sense of how the sequence has worked.



4 [maroon] **Madame**

Madame Dalsace is a constellation of presences in the house. Her locus is her *boudoir*, a private dayroom on the first floor.[9] Its interior seems initially to be completely separated from the rest of the house with a wall of windows at the rear, affording clear, framed views to the garden. These can be closed off by a full height curtain creating a snug inte-

[9] See Anne Troutman, 'The Modernist Boudoir and the Erotics of Space', in Hilde Heynen and Gülsüm Baydar (eds.), *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (London: Routledge, 2005), 296, 298. What I am identifying as Madame Dalsace's boudoir has been called small sun room, dayroom, blue room, sitting room by others. Chareau referred to it as the boudoir, see Taylor, *Pierre Chareau* (1992), 133. This room is the only carpeted space in the house, and although it is suggested by early photographs that it had a tiled floor, as Dalsace's office, Dominique Vellay remembers the room always having 'midnight blue' carpet, Vellay, *La Maison de Verre* (2007), 8. Troutman argues that the boudoir was disappearing in the early twentieth century, yet remained as a bourgeois 'sensibility'. The term comes from the French *bouder,* to sulk, and is eighteenth century in origin. She suggests that the room originated as a transitional space, before evolving into one of retreat. Here, the footprint of the boudoir and the reception office below, with one curved wall, are uncannily similar, in a building where every other space is quite different.

rior space. A retreat, it is from here that Madame Dalsace makes her subsequent, fleeting appearances, pivoting as silent mistress of the house.

Firstly, the boudoir re-connects her to the house through its three corners. The inner darkest corner hides a *passe-plat*: a secretive rotating shelf in the wall, which provides a communicating plate between the inhabitable kitchen cupboards off the dining room and the boudoir, for the discreet passing of refreshments, or other pleasures. She summons cups of tea and 'a glass cake box with a silver lid […] filled with delicious cinnamon biscuits'.[10] The diagonally opposite corner of the room projects beyond its expected edges with a tiny vestibule winter-garden.[11] Here, a transparent glass full-height framed window looks back over and into the house, towards the doctor's office and down to the circulation space from the waiting room into the clinical suite on the ground floor. If the patient entering the consulting room turns around and looks up, she sees a framed image of Madame Dalsace looking down and askance into the entrance of the clinical room sequence. She appears a ghostly silhouette, as the angle of the glass and the light behind create reflections and distortions. Madame finds the patient's identity equally hard to distinguish for the same reasons, leaving both with only an impression of each other.

Madame Dalsace also maintains a ghostly presence to the rest of the house making seemingly suspended appearances at several other moments. In the evening she appears at the top of the main stair to greet visitors in silhouette, as already described. On the wall opposite the base of the stair, the visitor is seen out by Jean Lurçat's portrait of her;

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[10] Vellay, *La Maison de Verre* (2007), 8.

[11] Described as a 'rupture' by Bernard Bacuhet, see Yukio Futagawa (ed.), *La Maison de Verre* (1988), 16.

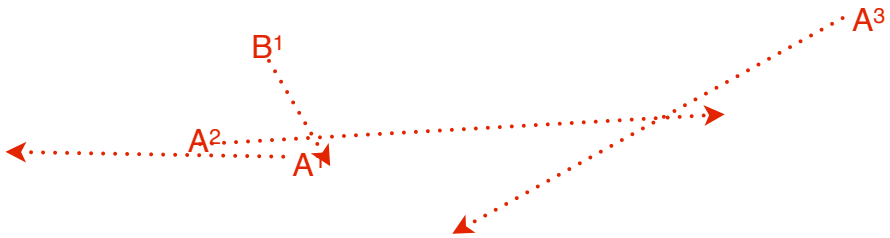
a reminder to whom the house belongs. She also appears inside the doctor's consultation room as a bronze head looking sternly down from a shelf behind the patient.[12]

Overseeing in these ways she mediates — in a parallel way to the nurse in the gynaecological examination or the Madame of a brothel — and indicates the erotics between the gynaecologist's practice and her own marriage. At the same time, her appearances are curtailed: she is apparently suspended and mute; her view often askance, refracted and cut off by glass; or, like the Bride in the *Large Glass*, imprisoned behind the same glass. There is a suggestion that she is floating out of reach. This dislocation leaves her ambiguous, disconnected from any real power.

[12] As an aside, Lipchitz who created the bronze head of Annie Dalsace, had an affair with Brazilian sculptor Maria Martins in the early 1940s when living in America. He created the sculpture *Yara I*, 1942, based on Martins own sculpture *Yara*, 1940. Duchamp began his own love affair with Martins in 1943. It is agreed that the body of the nude in *Étant donnés*, 1946–66, is based on Martins'. *Yara* sits in the courtyard to the Philadelphia Museum, opposite and overlooked by Duchamp's Large Glass. See Michael R. Taylor, *Marcel Duchamp: Étant donnés* (Philadelphia: Philadelphia Museum of Art; London: Yale University Press, 2009), 24–27.

Cuts

The *Maison de Verre's* convolutions are cut with specular lines, which open the layout, suggesting the intent of the building. These are moments of clarity, like views through unreflective clear glass, opening up the labyrinthine translucency. Following Duchamp's reading of 'cutting' as gaining possession, the cuts – from the patient and daughter's positions – raise the idea of view as reinstating either self-possession or control.



The patient gains three unexpected cut-like views through the building. The first, A1, occurs in the internal corridor. At its end, a black valve-like door opens to the reception office. She can now see straight through the rest of the building, through the back wall of the house to a garden. The light comes strongly from behind her and the combination of the light, creating a shadow falling before her and the view to the outside gives her the disorientating impression that she is not contained inside at all.

A second long cut, A2, occurs when the patient turns from the surgery to exit the house. In the entrance corridor, this time facing the inside front façade, her view is taken through the opened sliding glass screen, through the transparent glass of the front façade, through the courtyard, and along the passage to the inner face of the street doors, her desired destination. She is returned home as empty as a virgin.

A third cut, A3, occurs on the street. On a subsequent outing she happens to be passing down rue Saint-Guillaume. Despite the shut nature of the *Maison de Verre* to the street, occasionally

the right hand ground floor shutter to the street façade, which obscures a window to a common stair, is open. Looking in gives an unexpected view through the eighteenth century building, through the dark passage and courtyard to reveal a small corner of the façade of the building softly present in the distance. The building that allowed her to continue her life.

The third floor gallery to the interior of the building is the realm of the children. The eldest Dalsace child, a daughter, secretes herself up in this gallery behind the theatre box-like shelving and peers, B[1], through the gaps between to the stage-like salon below.[13] She sees across straight into the housekeeper's laundry room, behind a clear layer of glass. They make eye contact, a complicity between servant and child.[14]

These cuts, penetrations, relieve the sense of a building densely traced with interior convolutions. As a witness I can observe the potential of the cuts and repossess my position in the plan. The convolutions, because they remain suggestion or in the imagination that is, not fully comprehensible leave the building elusive. Like the Ocular Witnesses to the *Large Glass*, the cuts remind us that we are also being watched whilst trapped into its sensual translucencies.

[13] Vellay, *La Maison de Verre* (2007), 11, 106.

[14] The housekeeper has several cutting views which I return to in 'Dust'.

Slips

In 1901 Sigmund Freud outlined his interest in 'slips of the tongue', or 'parapraxes' to describe the meaning little errors in speech might have in understanding unconscious desire.[15] Rereading Freud, the slip connotes the slippery interstitial space, between two states, between the body and its communication. Tongue can mean the corporeal organ or the language formed by it. To slip is to be caught in the act of sliding between two states, and two places, between the body and language, text and image, interiority and exposure. Between intended meaning and error lies a kind of unspeakable gap, related to a stutter, a betrayal, as Freud puts it.[16] A space which resists categorisation, linked to suggestion, feeling and corporeality; a space of sensual erotics.

The spatial slips I describe here offer a description of the house of a married couple, Annie and Jean Dalsace. Their spatial interchanges suggest a different story of domesticity and marriage to that feared by Duchamp. The clinic installed in the house signifies a space of emptying out procreation, returning the body to a 'pure' state. The Dalsaces are therefore free to practice a form of consummation outside procreative imperatives.[17] The architecture reflects this in the parts of the building furthest away from the clinic on the first and second floors. At these points there is a slippage in the notation. Materials, spaces, and even building elements become interchangeable, between transparency, translucency and opacity, depending on their position. Glass, perforated metal,

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[15] Sigmund Freud, *The Psychopathology of Everyday Life* [1914], (trans.) Alan Tyson (Harmondsworth: Penguin, 1975), 71–114.

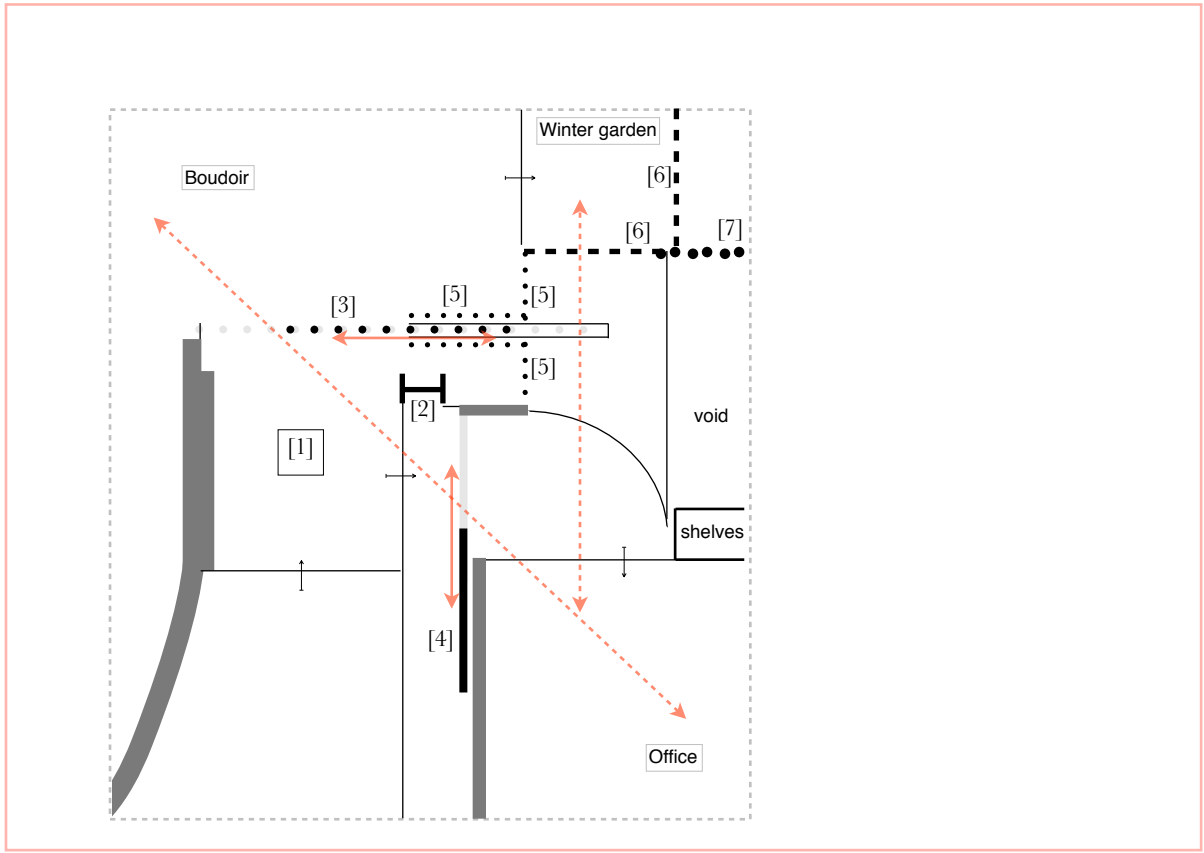
[16] Freud, *The Psychopathology of Everyday Life* (1975), 112.

[17] The Dalsaces had two children. The house was carefully constructed: the two child bedrooms have fixed beds, suggesting there was no intent to have more.

mirror and lacquer reflect, reveal or mask. Window, frame, and door merge or pass. Bed and bath, office and boudoir are paired. It is in these shifts of architecture, and here between the text and diagram, that an erotics may occur, a creative non-procreative domesticity, an alternative sense of dwelling, outside the political imperatives of the contemporary milieu.

I

The first slip is in the junctions between Madame's boudoir and Doctor's adjacent office on the first floor a 'sexually suggestive set of staggered doors'.[18] The potential is in the arrangement of two sliding doors and four separate layers of fixed roughcast glass fixed in a sideways T shape in plan [figure 4.32 [5]].



[18] Troutman, 'The Modernist Boudoir and the Erotics of Space' (2005), 308. She does not elaborate.

These recall Brassaï's description of the brothel '*Suzy*' of 1930s Paris. At '*Suzy*', he says 'there could be a whole system of sliding doors, curtains, trap doors [...] to protect one customer from ever meeting another.'[19]

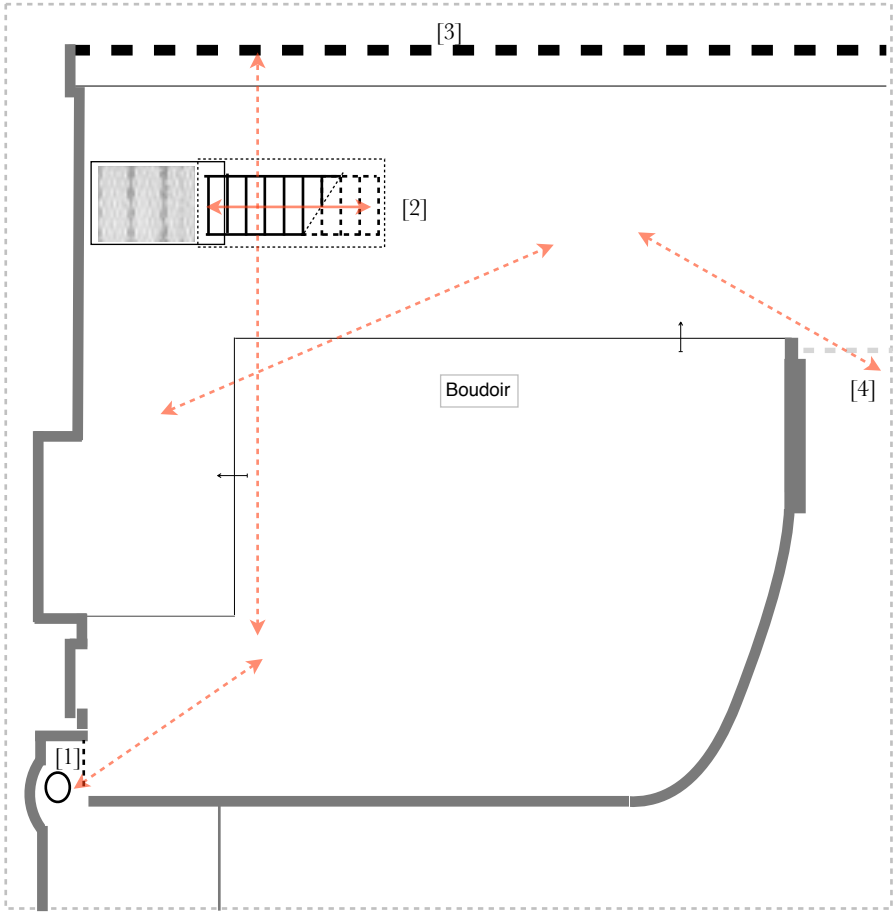
Here, the first sliding door, [3], is wired glass and allows access from the dining room into Madame's boudoir. It slides through the cross shape of glass panels into the doctor's room. When the door is open to the boudoir, his view of the winter-garden is obscured. He is therefore alerted to the fact that his wife is not present there. When she is in the room she slides the door closed behind her to listen to music, or receive guests revealing to him the projecting winter-garden through transparent framed glass [6].[18] As well as a communicative device, it is potentially a tease as Madame retreats with her guests. Further, she can assess her husband's movements by entering the corner winter-garden, and looking across into his office or down toward his consulting room. If he is in his office, their eyes meet across the void to the floor below. They cannot speak as the layer of clear glass lies between them with its doubling reflections.

The second sliding door, opaque, is to the side of the Doctor's office [4], and perpendicular to the boudoir door [3]. When both are open a last diagonal view connects the two rooms. These doors act as interchangeable silent or visual signs of communication and suggestion. Pockets, overlaps and glass reflections create double images and a folded sliding space. The occupants become the erotic glass planes slipping between outer and inner, opening and closure, presence and absence, knowing and seeing.

[19] Brassaï, *The Secret Paris of the 30's* [1931-9] (London: Thames and Hudson, 1976), unpaginated.

II

The second spatial slip and returns us to the interior of the boudoir. There are several stages to this slip.



[1] *Passe plat*
[2] Retractable stair
[3] Transparent framed rear facade
[4] Slip I

If the *passe-plat* dissolves the corner of the room as a flirtatious rotative offering,[20] this is matched by the precarious, steep, retractible stair opposite, rising against the glass facade to the master bedroom above. It parallels the Doctor's stair, and is equally impractical.[21] Although used rarely, it mentally connects Madame upstairs to her bedroom, similarly to the Doctor's connection from his office adjacent to her boudoir with his clinical suite below. It suggests an internal privacy from the views inherent in the free plan.

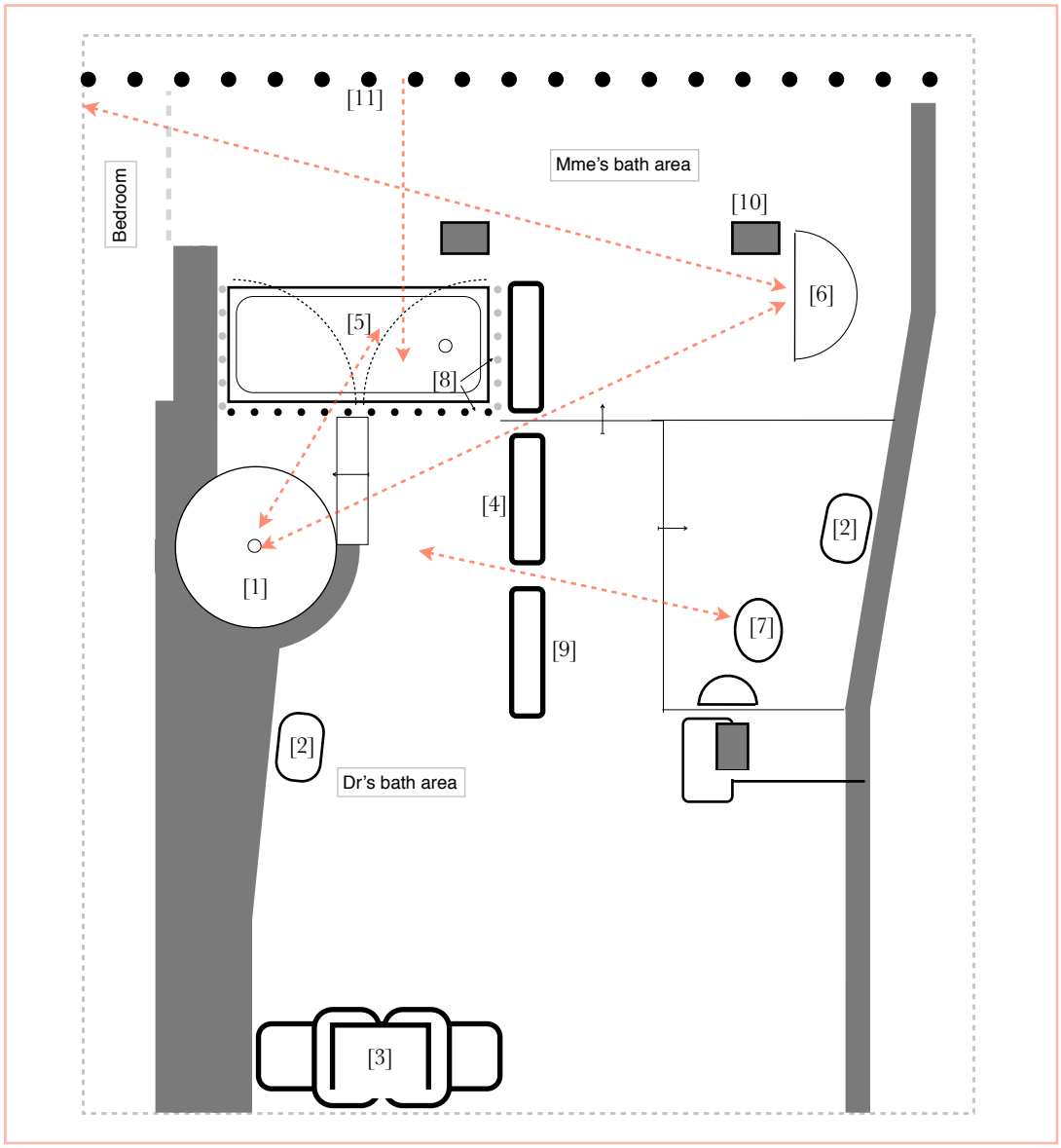
How it was exactly used remains uncertain. When open it hung down into the boudoir, like the *Pendu femelle*, all rickety and mechanical. To close, it became a complicated trap-like door into the floor with pulleys and mechanisms, enclosing bedroom from boudoir. A means of private communication between Madame and the Doctor, its up and down operation was the only movement in the building that could not be overlooked by others, a pocket rotating into hidden space like the *passe plat* opposite. A 'backstair', it is known only to the inner occupants making the bedroom the furthest retreat from the clinic. Madame can slip from boudoir unseen, even by her servants, against the glass backdrop to the garden, the only glass wall in the house with none of the lenses symbolic of the clinical practice. Once she has ascended to her bedroom she pulls the stair after her to make both boudoir and bedroom different places. The bedroom wall to the garden has a strip of two rows of glass lenses above clear plate glass windows, in direct opposition to Dalsace's office which is lensed with a high transparent clerestory. The bedroom and adjacent bathroom are connected by a further glass sliding door.

[20] Evoking the Chocolate Grinder of the *Large Glass*, a composition of 'lead fuse wire to trace the contours and draw the spokes of the machines vibrating rollers, which evoke delicacies and therefore pleasure.' Cros, *Marcel Duchamp,* (2006), 113.

[21] Portraits of Annie Dalsace and contemporaneous photographs show her dressed in long layered gowns and high heeled shoes. See, for instance, photograph of Annie Dalsace in 1920; portrait by Jean Lurçat painted in 1922, Vellay, *La Maison de Verre* (2007), 10, 27.

III

The final slip is in the Dalsace's shared bathroom next to the bedroom on the second floor.

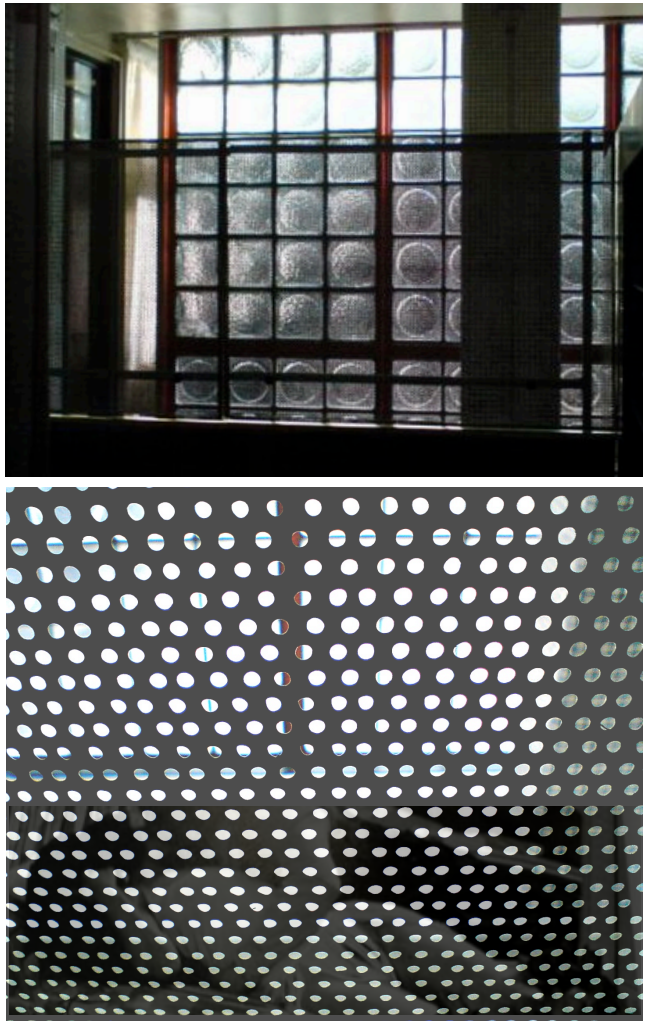


[1] Shower
[2] Basin
[3] Bifolding cupboard
[4] Mirrored compartments
[5] Bath
[6] Semi circular glass dressing table
[7] Bidet
[8] Perforated steel shutters
[9] Cupboard
[10] Encased column
[11] Lensed facade

This has two parts: an internal area with a shower and basin with mirrored compartments set in full height cupboards for shaving and other ablutions for Dr Dalsace; and at the far end inside the rear glass façade, an unbounded area with a bath, a semi-circular pivoting glass dressing table, bidet and basin for Madame Dalsace. The two installations have numerous visual connections. The shower and bath sit together, the opening to the shower directly next to the bath. Between are a pair of perforated steel hinged screens. These are opened like shutters across the two ends of the bath allowing direct visual and aural access between the bath and shower. When open, her husband taking a shower talks to or watches his wife in her bath, and vice versa. An exchange of looking occurs between the vertical male showering recalling the vertical Bachelors of the *Large Glass* and the horizontality of the female bathing like the horizontal cloud of Blossoming. The sensuality of bathing is as much at work here as hygiene.

When they have disagreed, Madame encloses herself behind the screens, blocking his gaze. Yet what she has not experienced, as she does not enter his portion of the room with its masculine functions, is that when these screens are closed she can still be seen, a suggestive shadow through the tiny peephole perforations, lit from behind by the light flooding through the glass lenses. This bears an uncanny resemblance to the relations of Duchamp's later *Étant donnés*, 1946 66 [Plate 79]. Her husband is able to see his wife's shadowy curves in the erotics of overlooking through a door which is both screen and peephole. He is always vertical, as such. Perhaps she is aware.

Plates 79: Left Perforated shutters [closed] between shower and bath at the *Maison de Verre*. **Right** Marcel Duchamp, *Étant donnes*, 1946 66. Philadelphia Museum of Art, May and November 2010.



Glass Part-architecture

The readings of ‘Transparency’ and ‘Translucency’ define a territory between the visual spatial object and writing the inhabitation and use of that object. The building and artwork are seen here as sets of objects – body parts, materials and instruments – which trigger or house a series of overlapping architectural narratives. What can be seen, measured as materially there, is a catalyst for ghostly or imagined people and events. For example, if you were to look closely at a single glass lens from the outside – really closely – and gaze at and through its facets to the light inside, then walk around to its other side, measure out the light cast on the floor that you thought you saw, against the other shadowy shapes detected and imagined and the history they suggest, touch the lens’ smooth inner surface, and look back through to the outside where you see a man standing, you will have travelled through the glass not just using sight but engaging in the narrative the object suggests [Plate 74]. There, in that time spent and the potential story you see and reconstruct through that glob of glass, no matter how blurred and intangible, in the associations it makes with the past and the body, plus the impossibility of really knowing what it means – lies its part-architecture.

5 Dust

MATERIAL COLLECTION

Dust
Dust Breeding
Skin
Decay
City Dust
House
Cleaning and Modernity
Housekeeping

HOUSE AS ARCHIVE

Plans
Dark Room
Architecture as Archive
Dust Recovery

INTANGIBLE OCCUPATION

Four Women
Annie Dalsace / Dark Rooms
Housekeeper / Dusting
Writing dust / Motes
Mary Reynolds / Dust Jackets
Dust Part-architecture

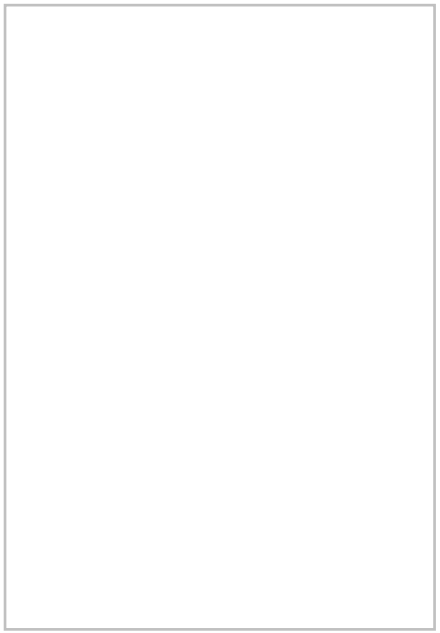


Figure 5.1: Eugene Atget, *Ragpicker's Hut*, 1923–24. Printed by Berenice Abbott, 1956. V&A Collections.

This chapter moves away from the visual understanding implied by glass to a material that can be seen yet challenges vision, dust. Normally overlooked, it is as prevalent as glass in the *Large Glass* and the *Maison de Verre*. Its presence serves as a metaphor for the body, occupation of the building, and the sense of history that implies.

The chapter has three parts. 'Material Collection' establishes dust as the mass of tiny remnants leftover from the built environment and the body. Deliberately collected onto the *Large Glass* as a sign of passing time, it is framed as an anathema to modernity. Its default presence in the *Maison de Verre* acts as a challenge to its hygienic programme.

As proposed in 'Part-object, Part-architecture', dust signifies the role of an archive to research.[1] In 'House as Archive', I analyse the 1928 design drawings of the *Maison de Verre.* Bearing little relation to the final building, the differences offer clues to the development of the clinic in the house. Rather than search for other missing archival material, I propose that the final house itself is an archival container and that its surfaces and dust are primary material clues to historic events to be decoded. Though this, the house is reconstructed as a causal setting for the events it has witnessed.

The final part, 'Intangible Occupation', establishes three female occupants of the house: Madame Dalsace; her housekeeper; and Mary Reynolds, Duchamp's lover in the 20s and 30s. In paired pieces, 'Annie Dalsace / Dark Rooms', 'Housekeeper / Dusting', 'Mary Reynolds / Dust Jackets', I explore each as a historical protagonist, followed by a project which springs from their position and occupation. These are informed by the contemporaneous written and visual

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[1] This follows Carolyn Steedman's proposition that dust is the 'idea' of the archive, see Carolyn Steedman, *Dust* (Manchester: Manchester University Press, 2001), 70, ix.

descriptions of Paris, and current social and medical histories and theories assembled in ‘Background’. In an acknowledgement of the paucity of some of the evidence for these women’s ideals, except dust, an additional paired section ‘Writing Dust / Motes’ evaluates my own position as a writer, preceding a fictional writing project which brings Mary Reynolds into the house from my/the housekeeper’s viewpoint. Here, proposal is established as a fictional reconstruction of the past.

Dust

> 'Dust is the opposite thing to Waste, or at least, the opposite principle to Waste. It is about circularity, the impossibility of things disappearing, or going away or being gone.'[2]

Although dust is regarded as base, lowly and unwanted, I argue that it is a material in its own right. When examined microscopically, the homogeneity of ordinary house dust is revealed as a complex composition of minute parts: skin, hair, corporeal emissions, animal and human excreta, soil, building materials, chemical pollution, paper and textile fibres, plant pollens, and dead insect parts.[3] The tiny remnants of our bodies' interactions with the accepted materials of the built environment – glass, timber, concrete, rubber – its presence in the home challenges those deliberate materials, and our desire for spatial order. Though coexistent with its origins, dust is the unacceptable leftover. Opposed to architecture as ordered space, dust is perceived anxiously, threatening to take over the modern home.

Dust is particular, the subject of its place. Each place collects very different dust. The rubbed off skin of particular bodies occupies a home, mixed with the home's own detritus and that walked in from those bodies' journeys to and fro outside. Dust then is not just the waste from body or building: it is the story of the body, the building and the city.

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[2] Steedman, *Dust* (2001), 164.

[3] See Joseph A. Amato, *Dust: A History of the Small and the Invisible* (Los Angeles: University of California Press, 2000), ix.

Dust breeding

> 'If a woman sifts, she is a 'sifter' and if a man shovels the dust to fill her sieve, he is a 'filler-in'.[4]
>
> 'Which you close up afterwards hermetically = Transparency –Differences to be worked out. For the sieves in the glass–allow dust to fall on this part a dust of 3 or 4 months and wipe well around it...To be mentioned the quality of *the other side of the dust* either as the name of the metal or otherwise.'[5]

If Duchamp described the *Large Glass* as a 'delay' on glass, the delay was, in part, the time it took him to make it. By 1920, he had been working on it in New York for five years. That year, having completed much of the lower male domain, he marked time by leaving the glass plate horizontally on its trestles for about four to six months. He called this action 'Dust Breeding'.[6] The dust gathered through neglect-as-design was an 'anti-retinal' and anti-modern gesture, a challenge to painting, finishing and transparency. It symbolised, as Rosalind Krauss puts it, a 'physical index for the passage of time'.[7]

The dust was gathered to a specific thickness, texture and quality. The result was recorded in Man Ray's 1920 photograph *Élevage de poussière* (*Dust*

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[4] Steedman, *Dust* (2001), 157; citing Mayhew on London's dustpickers of the nineteenth century.

[5] Marcel Duchamp, 'The Green Box' [1914], (trans.) Cleve Gray, in Michel Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973), 53. See Man Ray, *Self Portrait* (New York: Little Brown, 1963), 82, 91.

[6] See Calvin Tomkins, *Duchamp: A Biography* (London: Chatto and Windus, 1997), 155, 228. Duchamp's note begins: '[12. DUST BREEDING] To raise dust on Dust-Glasses for 4 months. 6 months.' See Duchamp, 'The Green Box' (1973), 53.

[7] Rosalind E. Krauss, 'Notes on the Index: Seventies Art in America', in *October*, Vol. 3 (Spring 1977), 74.

Breeding) [Plate 80]. The photograph was, Man Ray later said, taken very close, on a one hour exposure, whilst he and Duchamp went 'out to eat'.[8] Man Ray noted that Duchamp's studio was a mess: 'The floor was littered with crumpled newspapers and rubbish.' The dust on the glass included 'bits of tissue and cotton wadding that had been used to clean up the finished parts'.[9] As well as an index of Duchamp's activities in the studio, it must have also had particles from the New York atmosphere, visitors to the studio, and fragments of other works made at the same time. As a collection, the dust made the flat transparency of the glass opaque and three dimensional. It thickened the picture making an unknown relief. I read the photograph, taken at an angle, as depicting two opposing scales simultaneously – a distant landscape of hills and furrowed earth, and as flesh under a microscope. If we consider the *Large Glass* as a photographic plate unfolding [in] time, Man Ray's photo of it, thought to be 'one of the first representations of the *Large Glass*',[10] appears as a microscope slide to be scrutinised for something: a scored surface skinned over, in decay, death even.

Whilst waiting for the dust to fall, Duchamp conceived of his alter ego Rrose Sélavy.[11] Duchamp, a Catholic, claims Rrose emerged when, failing to find a suitable Jewish identity, he took on a feminine one. Intended to sound like *Eros,*

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[8] See Man Ray, *Self Portrait* (1963), 91.

[9] Man Ray, *Self Portrait* (1963), 82, 91.

[10] Caroline Cros, *Marcel Duchamp* (trans.) Vivian Rehberg (London: Reaktion Books, 2006), 72.

[11] He also made *Precision Optics*, 1920 and *Fresh Widow*, 1920, all in the name of Rrose Selavy. The signification of dust breeding – landscape, hair and skin – is made explicit in the nude of *Étant donnés*, 1946–66, see the next section, 'Skin'. On Rrose see Pierre Cabanne, *Dialogues with Marcel Duchamp* [1971], (trans.) Ron Padgett (New York: Viking Press, 1987), 64–65.

c'est la vie [sexual love, that's life], or '*arrose*', which means to water or to spray,[12] perhaps he absorbed the persona he had been depicting for five years, the negative of a woman. In an interview with Calvin Tomkins he said: 'It was not to change my identity, but to have two identities.'[13] The splitting of himself between genders followed the construction of the splitting of the male and female in the *Large Glass.* Looking at *Rrose* and the *Large Glass* the spectator is able to see both genders simultaneously, on both sides of the boundary. Both are androgynous.

Breeding is something women do, with fertility punctuated by the shedding of the skin lining the womb. The breeding or shedding of one kind of skin onto the glass was paralleled by Duchamp assuming the outer layer of skin to form Rrose, sometimes borrowing a hat or hands from a female friend.[14] The dust bred on the glass was the first act or layer of Rrose, a double production of the feminine onto the masculine realm of both the glass and Duchamp's body [figure 5.2]. The male Rrose was, as a woman, infertile, and playing on the contradictions inherent in the use of the word 'breeding', he writes: 'This is the domain of Rrose Sélavy/How arid it is – how fertile it is – how sad it is/View taken from a [sic] aeroplane by Man Ray -1921 [sic].'

Obsessed with the idea of acting free of shackles, I believe Duchamp's breeding of dust signified a kind of sexual act without the possibility of conception. The dust was the intended material for the Sieves, stacked cone shapes which appear to be opening out in an arc from the Bachelor moulds, which he had al-

Figure 5.2: Man Ray, *Rrose Sélavy*, c. 1920–1921. Philadelphia Museum of Art.

[12] Cabanne, *Dialogues with Marcel Duchamp* (1987), 64.

[13] Tomkins, *Duchamp* (1997), 231.

[14] Dawn Ades, Neil Cox and David Hopkins, *Marcel Duchamp* (London: Thames and Hudson, 1999), 109, 137.

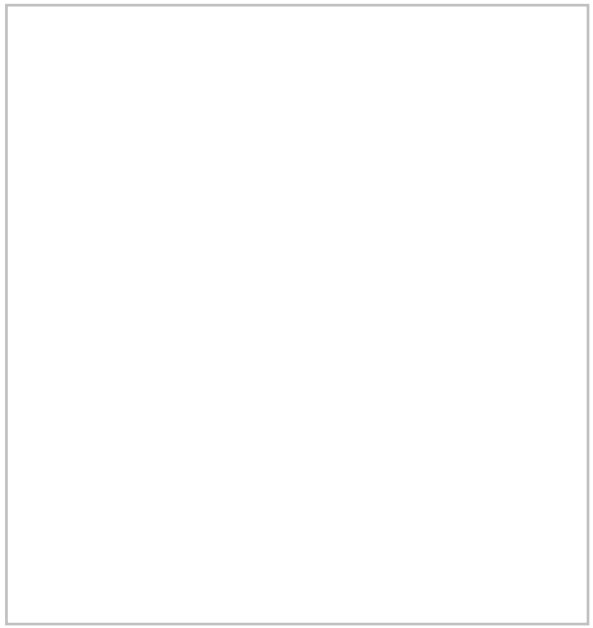

Figure 5.3: Marcel Duchamp, *Paysage fautif* (*Faulty Landscape*), 1946. Seminal fluid on Astralon, backed with black satin. Museum of Modern Art, Toyama, Japan.

ready outlined on the glass. According to the narrative accompanying the *Large Glass*, the Sieves contain a fog – the Illuminating Gas – raised from the Bachelors, which has condensed into liquid. The dust therefore also symbolises the literal release of fluid (semen) sprayed from the Bachelors, by way of Rrose. The onanistic seminal fluid, a fruitless emission from the body, is rendered as dust. Rrose and the dust, then, signify an onanistic form of anti-breeding, caught between a male and female layer.[15]

When the breeding was finished, Rrose/Duchamp played housekeeper and cleaned away the material outside the outline of the seven Sieves. The remaining landscape of corporeal activity and city was sealed permanently in place with varnish. The varnish has been mythologised by some to be actual seminal fluid, which he certainly later utilised in *Paysage fautif* (*Faulty Landscape*), 1946, a gift for Maria Martins, his lover from 1943–51, ultimately unattainable when she returned to her husband [figure 5.3].[16] Sealed in, the varnished dust became an encapsulated past unknown – we shall never know its actual composition – registering now as a pigment to the glass [figure 5.4].

Skin

The upper 'female' part of the *Large Glass* was left propped up in Duchamp's studio looking askance at the lower part breeding. A 'painted lady', she was imprisoned behind the glass, recalling Louis Aragon's description of a surprised

[15] As we have seen earlier in 'Glass' Duchamp remarked on the Chocolate Grinder, 'the bachelor grinds his chocolate himself.' Duchamp, 'The Green Box' (1973), 68.

[16] See Michael R. Taylor, *Marcel Duchamp: Étant donnés* (London: Yale University Press, 2009), 29; Cros, *Marcel Duchamp* (2006), 157.

prostitute seen 'moving about just behind the windowpane' of the arcade.[17] Duchamp's Bride is an image caught between pleasure and avoidance. The Sieves fail to inseminate her and she blossoms alone. Like the prostitute at the shop window, she is a symbol of pleasure without conception.[18] Indeed, outside medical institutions, prostitutes were thought to be the most knowledgeable about abortive techniques.[19]

The Bride's blossoming appears as a fluid-like skin opening up across the glass.[20] In French the word Duchamp uses is *épanouissement* which also translates as: 'opening out, of expansion or development of shock waves', suggesting orgasm. As Paul Matisse writes, it rhymes with *évanouissement* meaning fainting or stillness.[21] Naked, her 'garments' are dropped onto the transom as

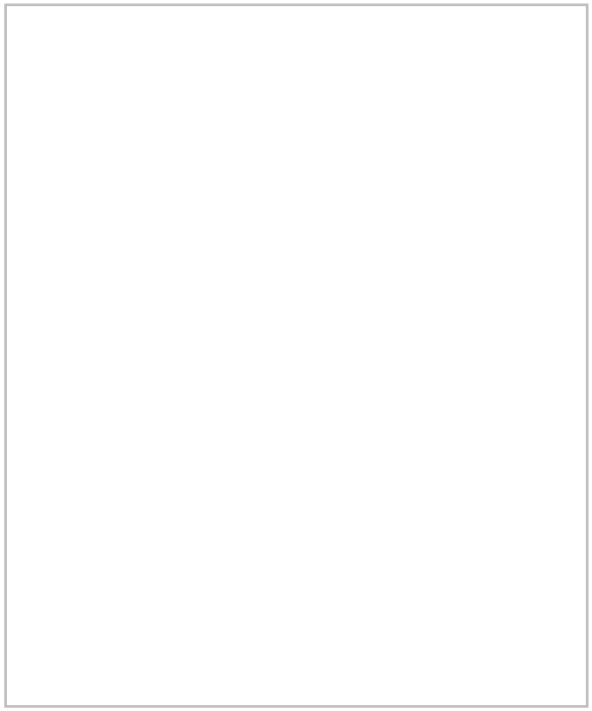

Figure 5.4: Marcel Duchamp, *Large Glass*, 1915–23. Sieves. Photograph Emma Cheatle May 2010.

[17] Louis Aragon, *Paris Peasant* [1926], (trans.) Simon Watson Taylor (Boston: Exact Change, 1994), 37. 'Painted lady' comes from Sigmund Freud's descriptions of prostitutes he saw behind windows in his essay 'The Uncanny', see Sigmund Freud, 'The Uncanny' [1919], in *Art and Literature: Jensen's Gradiva, Leonardo and Other Works,* (trans.) James Strachey (London: Penguin Books, 1990), 339–376.

[18] This idea comes from Walter Benjamin, *The Arcades Project*, (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002), [J67a,1], 348.

[19] See Mathurin Regnier, *Les Satyrs: oeuvres complètes* (Paris 1958), 160–61, and Angus McLaren, 'Abortion in France: Women and the Regulation of Family Size 1800–1914', in *French Historical Studies,* X/3, (Spring 1978), 464.

[20] Duchamp, 'The Green Box' (1973), 28. On the Bride's blossoming being veil-like see Penelope Haralambidou, *The Blossoming of Perspective: An Investigation of Spatial Representation* (unpublished doctoral thesis, University of London, 2003).

[21] See translator's notes, Marcel Duchamp, *Marcel Duchamp, Notes* (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980), xvi.

three strips of glass further separating upper and lower planes.[22] At my eye level, the three strips veil my view of the body.

Pleasure seems to have won over procreation with the dust of the Sieves and veil-like skin byproducts. As seen earlier, skin is a component of dust, and a skin of dust forms on other materials. The dust of the Sieves and skin of the Bride are hence interchangeable, or metaphorically formed from each other, as a material trace of each as the other's pleasure. The Bride's blossoming, though, is contradictory. As argued in the chapter 'Glass', her body is both a set of genitalia and the gynaecological instruments for emptying her uterus in violent/violate imagery.

The Bride of the *Large Glass* presages Duchamp's later work *Étant donnés*, 1946–66. I investigate *Étant donnés* briefly here for the retrospective light it sheds on the *Large Glass.* Though both pieces raise questions on his perception and objectification of the female body, they resist final fixed meanings, instead presenting clues to a series of mysteries around their materiality, making and signification.[23] Rather than repelled, particularly by the more gruesome reductive

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[22] Duchamp, 'The Green Box' (1973), 66. Also see Craig Adcock, 'Duchamp's Perspective: The Intersection of Art and Geometry',http://www.toutfait.com/issues/volume2/issue_5/news/adcock/adcock1.htm, (April, 2003), 1. *Étant donné no 9* (Paris: Association pour l'Étude de Marcel Duchamp, 2009), 224.

[23] On the construction of *Étant donnés,* see Marcel Duchamp, *Manual of Instructions for Étant donnés: 1° – la chute d'eau, 2° – le gaz d'éclairage* (Philadelphia: Philadelphia Museum of Art, 1987); Taylor, *Marcel Duchamp* (2009), particularly Melissa S. Meighan, 'A Technical Discussion of the Figure in Marcel Duchamp's *Étant donnés*', in Michael R. Taylor, *Marcel Duchamp: Étant donnés* (London: Yale University Press, 2009), 240–261.

interpretations made of *Étant donnés,* I am drawn into further enquiry.[24] For me, *Étant donnés* is a younger version of the *Large Glass* displaying many of the same preoccupations in a lifelike setting. Where the *Large Glass* seems an experiment in frustrated desire, *Étant donnés* is an inanimate tableau of desire and loss, a homage to Maria Martins, long lost to him by the time of its completion.

The two works exhibit similar elements both physically and metaphorically. The three part space of the *Large Glass* – lower plane and upper plane with the transom of Bride's garments veiling between – is unfolded as the tripartite room of *Étant donnés*: the foreground in which the spectator stands; the door and space beyond through which he peers; and space of the Nude reclining in the landscape beyond [Plates 33–36, figure 5.5]. The body of the Bride is refigured as the reclining Nude. The spectator is the Bachelor voyeur stripping her with his gaze. The Oculist Witnesses are the peepholes in the rustic door, guiding that gaze. But it is the skin of the Bride, a painted floating veil blooming out from her mechanical body, that is mimicked almost perfectly by *Étant donnés'* Nude. The sculptural body, constructed from a lead, steel and plywood armature with a painted skin of parchment wrapped over, follows the Bride's mechanised structure of instruments with the skin-like blossoming lifting off.[25] Erotic and unerotic, they

[24] On *Étant donnés* as a representation of a literal crime scene see Mark Nelson and Helen Bayliss Hudson, *Exquisite Corpse: Surrealism and the Black Dahlia Murder* (Bullfinch Press, 2006). Michael Taylor refutes any literal connection between the 1947 murder and dismemberment of Elizabeth Short, as well as other reductive interpretations. Taylor, *Marcel Duchamp* (2009), 194–197. Yet the scene Duchamp creates is agreed to be highly ambiguous. It is not clear what status the figure holds.

[25] Meighan, 'A Technical Discussion of the Figure in Marcel Duchamp's *Étant donnés*' (2009), 247–249. Meighan's full list of materials is ' lead strips […] threaded rod, iron bars and tubing, aluminium and/or tin and brass sheet; coarse welded steel wire screen and bits of Peg-Board; and wood.' 'All […] covered by or embedded in gray putty.' The parchment was painted from the underside with thick oil based paint.

Figure 5.5: Marcel Duchamp, *Étant donnés: 1° la chute d'eau, 2° le gaz d'éclairage*, 1946–66. Mixed media assemblage: wooden door, bricks, velvet, wood, leather stretched over armature of iron and lead, glass Plexiglass, linoleum, cotton, electric lights, gas lamp (Bec Auer type), motor, etc., 242.6 x 177.8cm, (**top**) detail, photograph Emma Cheatle; and (**bottom**) cardboard model.

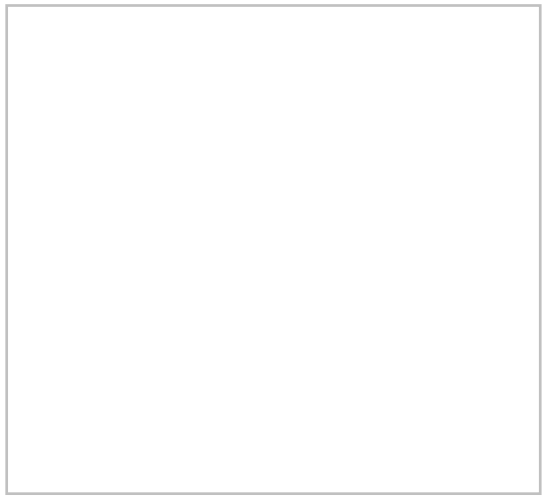

Figure 5.6: Marcel Duchamp, *Étant donnés*, 1946–66, Philadelphia Museum of Art. Photograph Emma Cheatle May 2010.

are both painted on the underside, on the back of their skin-like materials, before being sealed in, caught in a static, suffocating moment [figure 5.8]. Further, my reading of *Dust Breeding* as between a landscape and a skin, is repeated by my assertion that the Nude's surface becomes continuous with the pastoral landscape pictured in the background [figure 5.7].

Duchamp's portrayal of women was smooth, unerotic. He famously, 'abhorred *abominable abdominal furs*'.[26] His later 'erotic objects', the *Female Fig Leaf*, 1950, the *Wedge of Chastity*, 1954, pictured in the previous chapter [Plate 48, page 275], and the splayed nude in *Étant donnés*, 1946–66 are also prepubescent with no sign of hair or clitoris [figure 5.6]. In this aspect he was of his time. Until 1924 there was wide censorship of illustrations of female genitalia from public manuals and medical information aimed at girls. For gynaecological examinations and operations the pubis was shaved. Gynaecology rarely referred to the clitoris except as 'an anatomical description', or where it was a challenge to social and medical perceptions of normality.[27]

The Nude's skin, originally thought to be pig-skin, has been proved to be parchment (cow or calf skin), possibly transported from France.[28] Until 2009, its progeny remained disputed. Artist Robert Barnes, who assisted Duchamp on the artwork, claimed in an interview 'to have picked up the [second] pigskin at a dock

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[26] Jean Suquet, 'Spiraling' in Marc Décimo (ed.), *Marcel Duchamp and Eroticism* (Cambridge: Cambridge Scholars Publishing, 2007), 27.

[27] See Dr Anna Fischer, *La femme, médicin du foyer*, (trans.) Louise Azéma (Paris: A. Posselt, 1924). See Henri Hartmann, *Gynécologie Opératoire* (Paris: G. Steinheil, 1911), section on '*Hypertrophie'*, 110–111; Ann Dally, *Women Under the Knife* (London: Hutchinson Radius, 1991), 160–161.

[28] That is 'animal skin that is mechanically and chemically processed but not tanned, and that is thin yet strong and very pliable when wet.' Meighan, 'A Technical Discussion of the Figure in Marcel Duchamp's *Étant donnés*' (2009), 246–7.

from a butcher dressed in a white apron. He picked up one barrel, filled with water or brine.'[29] Barnes also remembers that by 1956, ten years before its official completion, *Étant donnés* was finished: 'done sitting, gathering dust'.[30] Now, the parchment skin and real hair are kept as dust free as possible. Specified by Duchamp in the *Instructions*, a sheet of glass is hung horizontally above, sealing in the tableau to reduce heat from the lighting above and prevent dust breeding.[31] Where the glass of the *Large Glass* is a medium for collection onto the picture plane, that of *Étant donnés* reduces pollution by chance detritus onto the scene below it.

Decay

As two works whose meanings are still debated, they seem now at a critical point. They are a set of clues to an unsolv-ed/able mystery in a process of literal decay and dilapidation. The Bride and the Nude are respectively, at the time of writing in 2012, approximately ninety-two and fifty-six years old.[32] As bodies, they are elderly and middle-aged ladies, delicate, decomposable, constructed as they are from experimental materials with a fixed shelf-life. The *Large Glass,* literally a shattered object since 1926 is continuing to age, and is too fragile to be moved. The sealed dust of the Sieves is cracking and peeling like flakes of dead skin [fig-

[29] See Thomas Girst, '"A very normal guy": Robert Barnes on Marcel Duchamp and *Étant Donnés*', http://www.toutfait.com/issues/volume2/issue_4/news/barnes/barnes1.htm (January 2002), 1.

[30] See Girst, '"A very normal guy"' (2002), 1.

[31] Duchamp, *Manual of Instructions for Étant donnés* (1987), 20–21.

[32] The Bride was finished sometime in 1920. Meighan dates the beginning of the making of the final skin figure of the Nude as 1951. Meighan, 'A Technical Discussion of the Figure in Marcel Duchamp's *Étant donnés*' (2009), 258. As we have seen it was finished by 1956.

Figure 5.7: Marcel Duchamp, *Étant donnés: 1° la chute d'eau, 2° le gaz d'éclairage*, 1946–66. Detail. Photograph Emma Cheatle 2010.

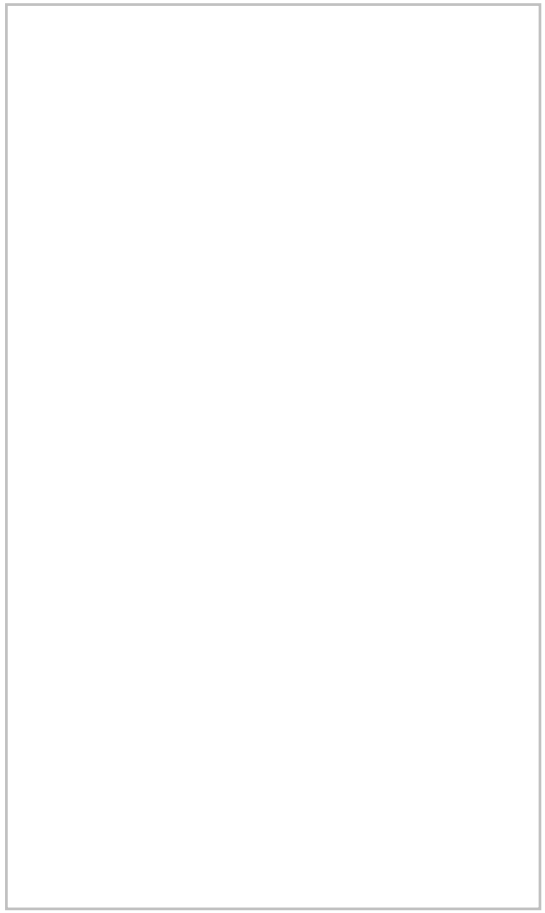

Figure 5.8: Marcel Duchamp, *Large Glass*, 1915–23, Philadelphia Museum of Art. (**top**) Photograph from behind; (**bottom**) dust collecting at junction, Emma Cheatle May 2010.

ure 5.4]. On the back of the glass, what appears to be white paint or putty is cracking and turning to dust [figure 5.8]. The Nude has aged too. Thought to be cast or modelled from Martins' body when she was around fifty, she appears as a hairless, muscular and youthful pre-pubescent girl (or boy as Jean-François Lyotard asserts.[33]) Her materiality is worse off than she first appears. Her (animal) skin is now fragile and cracked to the point of tearing.[34]

It is thought by Michael R. Taylor that *Étant donnés* represented, or at least paralleled, Duchamp's increasing interest in mortality and decay.[35] Indeed, despite its completion some time before, Duchamp only allowed its release for public viewing after his own death and it remained secret until then.[36] The Nude's inevitable ongoing fragility further suggests death. The works, like history and bodies, are ephemeral – their material cracking, opening up, oxidising as air creeps in – dying, returning to dust. When I visited *Étant donnés*, the air flow through the vestibule in which the Nude lies was startlingly cool, a mode of preservation which reminded me of a morgue.[37] Preservation of materials and evidence is the forensics of a crime scene. Clues become precious artefacts for decoding. Their loss through age, oxidation, dust collection, suggests a potential loss of evidence.

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[33] Jean-François Lyotard, *Les Transformateurs Duchamp Duchamp's TRANS/formers* [1977], (trans.) Ian McLeod (Leuven: Leuven University Press, 2010), 10.

[34] See Taylor, *Marcel Duchamp* (2009), 75–79, 148.

[35] Taylor, *Marcel Duchamp* (2009), 96–97.

[36] Julian Jason Haladyn, *Étant donnés* (London: Afterall, 2010), 5.

[37] *Étant donnés* is kept at a steady temperature and humidity for preservation. Taylor, *Marcel Duchamp* (2009), 148.

Plate 80: Man Ray, *Élevage de poussière* (*Dust Breeding*), un-cropped photograph, 1920.

City Dust

I have argued that the *Large Glass* is a response to Parisian pre-war society. The dust is collected from New York, the context to which Duchamp escaped, and which allowed him the make the artwork. I now return to Paris to analyse its dust as the backdrop to the *Maison de Verre's* modernity.

The structure of the medieval city, 'Old Paris', persisted into the nineteenth century [figure 5.9]. Defined at the perimeter by a complete medieval city wall, its interior was a ragbag collection of *quartiers* (ancient districts), squares, alleys and marketplaces, with medieval street patterns easy to get lost in, all populated, in literature at least, by the figures of prostitute and ragpicker.[38] Georges-Eugène Haussmann [1809–1891], the infamous planner charged with reforming the city by Napoleon III [1808–1873] from the 1860s, claims to have spent his youth, 'often absorbed […] in protracted contemplation of a map of this many sided Paris, a map which revealed to me weaknesses in the network of public streets'.[39]

Haussmann's dismantled and rebuilt Paris in a new modern image. The alterations subdivided the city with *percements* (piercings or openings) and created new monuments in key positions.[40] New wide boulevards with pavements

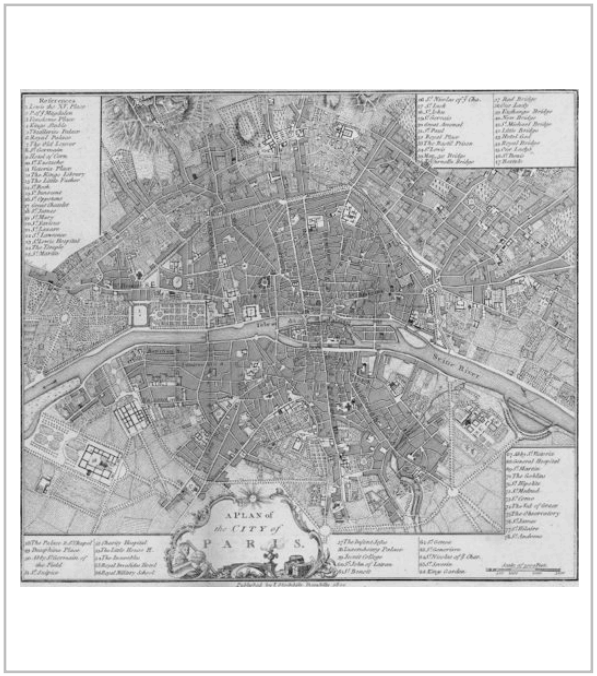

Figure 5.9: J. Stockdale, Plan of Paris, 1800. Commons Wikimedia.

[38] Descriptions are based on Theodore Zeldin, *France 1848–1945: A History of French Passions* (Oxford: Clarendon Press, 1973–81); Éric Hazan, *The Invention of Paris: A History in Footsteps*, (trans.) David Fernbach (London: Verso, 2010), 222; David Harvey, *Paris, Capital of Modernity* (London: Routledge, 2003); James F. McMillan, *France and Women, 1789–1914, Gender, Society and Politics* (London: Routledge, 2000).

[39] Georges-Eugène Haussmann, *Mémoires du Baron Haussmann*, vol. 2 (Paris, 1890), 34–35.

[40] See David van Zanten, *Building Paris: Architectural Institutions and the Transformation of the French Capital, 1830–1870* (Cambridge: Cambridge University Press, 1994), 217. See also François Loyer, Paris Nineteenth Century Architecture and Urbanism, (trans.) Charles Lynn Clark (New York: Abbeville, 1988).

were accompanied by new gas lighting, widespread transport, and infrastructure such as seating, fountains and kiosks.

This 'boulevardising' cut through ancient infrastructure, resulting in a radical removal of what was considered detritus: medieval street patterns, old buildings, arcades and markets, the 'low culture', prostitution and *populaire.*[41] As Le Corbusier described 'Haussmann cut immense gaps right through Paris, and carried out the most startling operations. It seemed as if Paris would never endure his surgical experiments.'[42] Despite the new lines of sight and radical modern improvements, many, including Walter Benjamin, were deeply critical, deeming the alterations to be based on an anti-insurrectionary and hygienist stance [Plate 81].[43] His *Exposé of 1935* ascribes Haussmann's power over the city to 'dictatorship', resulting in 'raising rents [which] drive the proletariat to the suburbs', and 'estrange Parisians from their city.' [44]

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[41] As documented by Eugene Atget until the 1920s, see Molly Nesbit, *Atget's Seven Albums* (New Haven: Yale University Press, 1992). Nesbit uses the word 'document' over 'art' to describe Atget's approach to recording Paris, a place he knew was rapidly changing. 'Boulevardising' is Haussmann's term, see Haussmann, *Mémoires du Baron Haussmann*, vol. 2 (Paris, 1890), 18.

[42] Le Corbusier, *Urbanisme* (Paris, 1925), 149, cited by Benjamin, *The Arcades Project* (2002), [E5a,6], 133.

[43] Walter Benjamin asserts that the projects were 'to secure the city from civil war'. Widened streets would make it impossible to erect the barricades of insurgency, see Walter Benjamin, 'Exposé of 1935', in *The Arcades Project*, (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002), 12. David P. Jordan argues against this, see David P. Jordan, 'Haussmann and Haussmannisation: The Legacy for Paris', in *French Historical Studies*, Vol. 27, No. 1 (Winter 2004), in *French Historical Studies*, Vol. 27, No. 1 (Winter 2004), 94. See also Rosemary Wakeman, 'Nostalgic Modernism and the Invention of Paris in the Twentieth Century', in *French Historical Studies*, Vol. 27, No. 1 (Winter 2004), 115–144.

[44] Benjamin, 'Exposé of 1935' (2002), 12. I look at Haussmannisation again in the following chapter 'Air'.

If nothing else Haussmann's destruction must have created immense amounts of city dust. Yet, in the nineteenth century, the interior was thought of as dirtier than the exterior: 'Paris deserts its houses. Its houses are dirty on the inside, while its streets are swept every morning.'[45] Further, the middle-classes were taking to the streets indicating an inversion between domestic and public space. Sharon Marcus, amongst others, has argued that the public realm became a new sequence of interior spaces to be occupied. She writes: 'Pedestrian sidewalks newly lined with trees [etc] became physically and visually isolated and protected from the road and its vehicular traffic [making them appear] to be relatively interiorized spaces out of doors.'[46] As the Goncourt brothers noted at the time: 'Social life is beginning to undergo great change. One can see women, children, husbands and wives, whole families in the cafe. The home is dying. Life is threatening to become public.'[47] The street became an extension of the apartment buildings and shops lining it: an interiorised exterior. Haussmann's modernity had domesticated the urban.

The changes not only perpetuated the feeling of a spacious city, but, arguably, made it safer for and more amenable to women.[48] Public life for the female had until now been connoted with the figure of prostitute. Although regulated since 1816 – each prostitute registered with the police – changes to public

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[45] Alfred Delvau, *Histoire anecdotique des cafés et cabarets de Paris* (Paris: Dentu, 1862), 3–5, cited by Marcus, *Apartment Stories* (1999), 149.

[46] Sharon Marcus, *Apartment Stories: City and Home in Nineteenth-Century Paris and London* (London: University of California Press, 1999), 140.

[47] Edmond de Goncourt and Jules de Goncourt, *Pages from the Goncourt Journal* [1851–96] (trans.) Robert Baldwick (New York: New York Review of Books, 2007), 53.

[48] See also the views of Hazan, *The Invention of Paris* (2010), 18; 105–8; Horne, *Seven Ages of Paris* (2002); Hussey, *Paris* (2006).

life now affected their position. From 1900 the law banned street solicitation and required the women to be interiorised in *maisons de rendezvous*, brothels with an entrance fee [Plate 82].[49] Another switch had occurred: the bourgeois woman took to the dusty yet domestic streets whilst the prostitute ('saleswoman and wares in one'[50]) was now housed in a seemingly private interior as a public commodity.

Paris had long been thought of as a sexualised female, as Charles Baudelaire neatly described: 'somewhere between queen and prostitute'.[51] Despite Haussmannisation, it continued to be coded as such, particularly by the *flâneurs* and surrealists of the late nineteenth and early twentieth centuries. Louis Aragon and André Breton, for instance, identified streets, arcades or cafés as spaces of the female figure, whether lover or prostitute. Breton termed the place Dauphine on the Île de la Cité – known as an erotically charged meeting place since the early 1600s when commissioned by Henri IV – the vagina or clitoris of Paris [figure 5.10].[52] Aragon nostalgically described the few remaining glass arcades hidden behind the 'monumental façades' of Haussmann's new apartment buildings: with large transparent shop windows at ground level they were 'out of

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[49] Theodore Zeldin, *France 1848–1945: A History of French Passions, Vol. 1* (Oxford: Clarendon Press, 1973), 307–8. 'In the years 1871–1903, some 155,000 women registered as prostitutes but police arrested 725,000 others suspected of prostitution.' [The population of Paris in 1926 was 2,838,416, see Roy Elston, *Cook's Traveller's Handbook to Paris* (London: Thomas Cook and Son, 1931), 23.]

[50] Walter Benjamin, 'Paris, Capital of the Nineteenth Century', in *Reflections,* (trans.) Edmund Jephcott (New York: Schocken, 1989), 157.

[51] Pierre Citron, *La Poésie de Paris dans la littérature française de Rousseau à Baudelaire* (Paris: Éditions de Minuit, 1961), Chapter 7.

[52] See Hussey, *Paris* (2006), 139–40; and André Breton, *La Clé des champs* (Paris, 1967), 280, as cited by Michael Sheringham (ed.), *Parisian Fields* (London: Reaktion Books, 1996), 89.

the dusty streets', their inner spaces concealing the prostitute as their chief commodity.[53] The most frequented and adored of the *passages*, the *Passage de l'Opera*, hinged around the prostitutes hidden upstairs. As Aragon related: 'Everything is contrived to facilitate hasty departures, to conceal from casual observers the trysts which will muffle some great secret', where can be heard 'involuntary sighs of pleasure filtering through closed doors. At odd intervals the corridors light up […] Then happiness unravels, fingers unlace and, an overcoat makes its way down towards the anonymous day, towards the country of respectability.'[54] The same *flâneurs* also idolised the outdoor ragpickers as collectors, like themselves, of objects from dustheaps, the leftovers of the city.[55]

Haussmann, who hated the arcades, and the riffraff they housed, had the posthumous last laugh as the *Passage de l'Opera* was torn down in 1925 to open the final part of the ring of *Grands boulevards*: the boulevard Haussmann.[56]

Figure 5.10: J. Stockdale, Plan of Paris, 1800. 49: Place Dauphine.

[53] Aragon, *Paris Peasant* (1994), 71, 19.

[54] Aragon, *Paris Peasant* (1994), 31–32.

[55] See Walter Benjamin, *Charles Baudelaire: a Lyric Poet in the Era of High Capitalism* (London: New Left Books, 1973), 57.

[56] Elston, *Cook's Traveller's Handbook to Paris* (1931), 24. Robin Walz, *Pulp Surrealism: Insolent Popular Culture in Early Twentieth-Century Paris* (London: University of California Press, 2000), 25. On the *Grands boulevards* and general 'granding' of Paris see Vanessa L. Schwartz, *Spectacular Realities: Early Mass Culture in Fin-de-Siècle Paris* (Los Angeles: University of California Press, 1998), 20–25.

Plate 81: 1800 plan of Paris by J. Stockdale amended to show boulevards and barracks, 2012.

Cut through with new Boulevards (lines) and the newly constructed, or expanded military barracks of Napoleon III (circular holes) from 1852-1870.

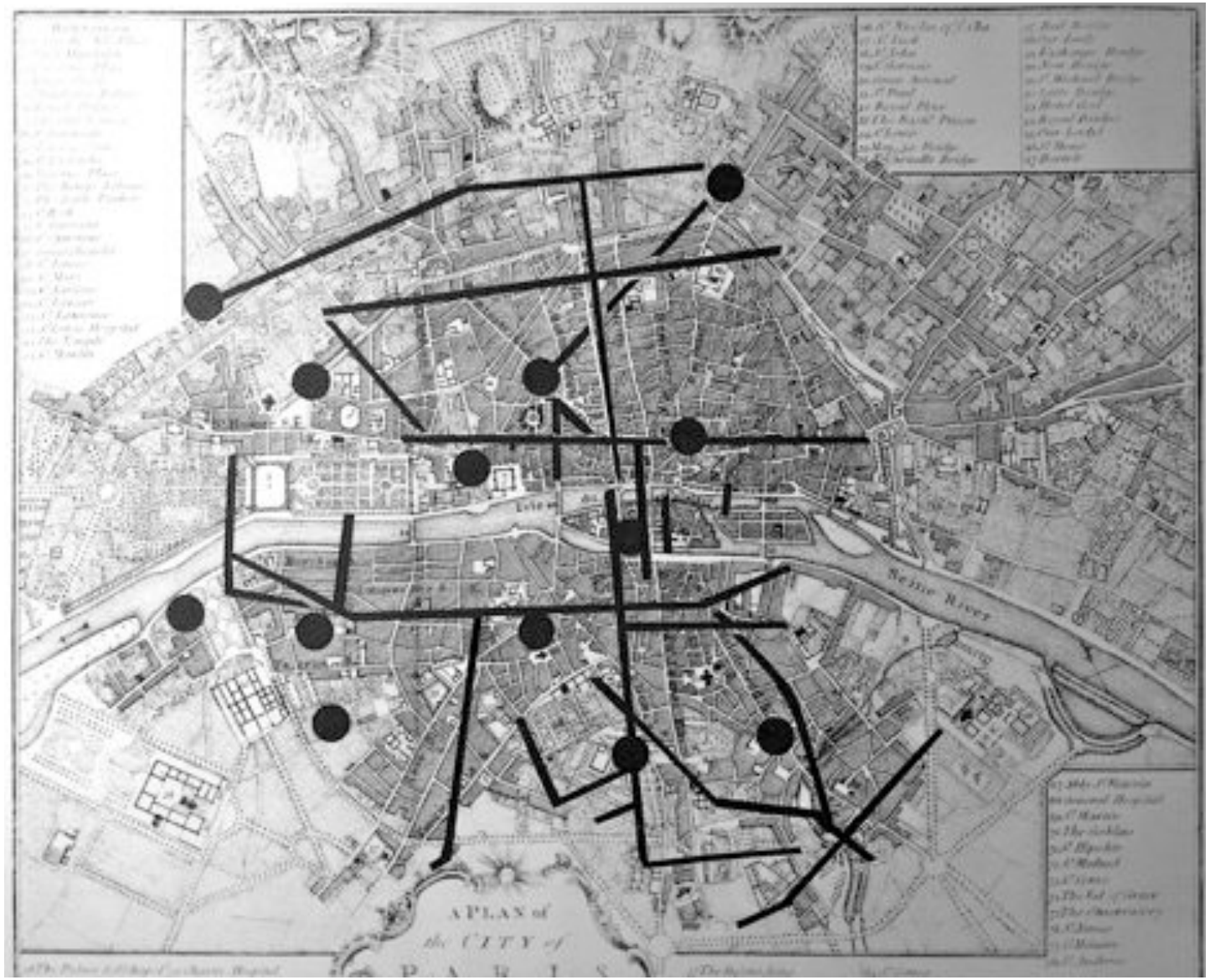
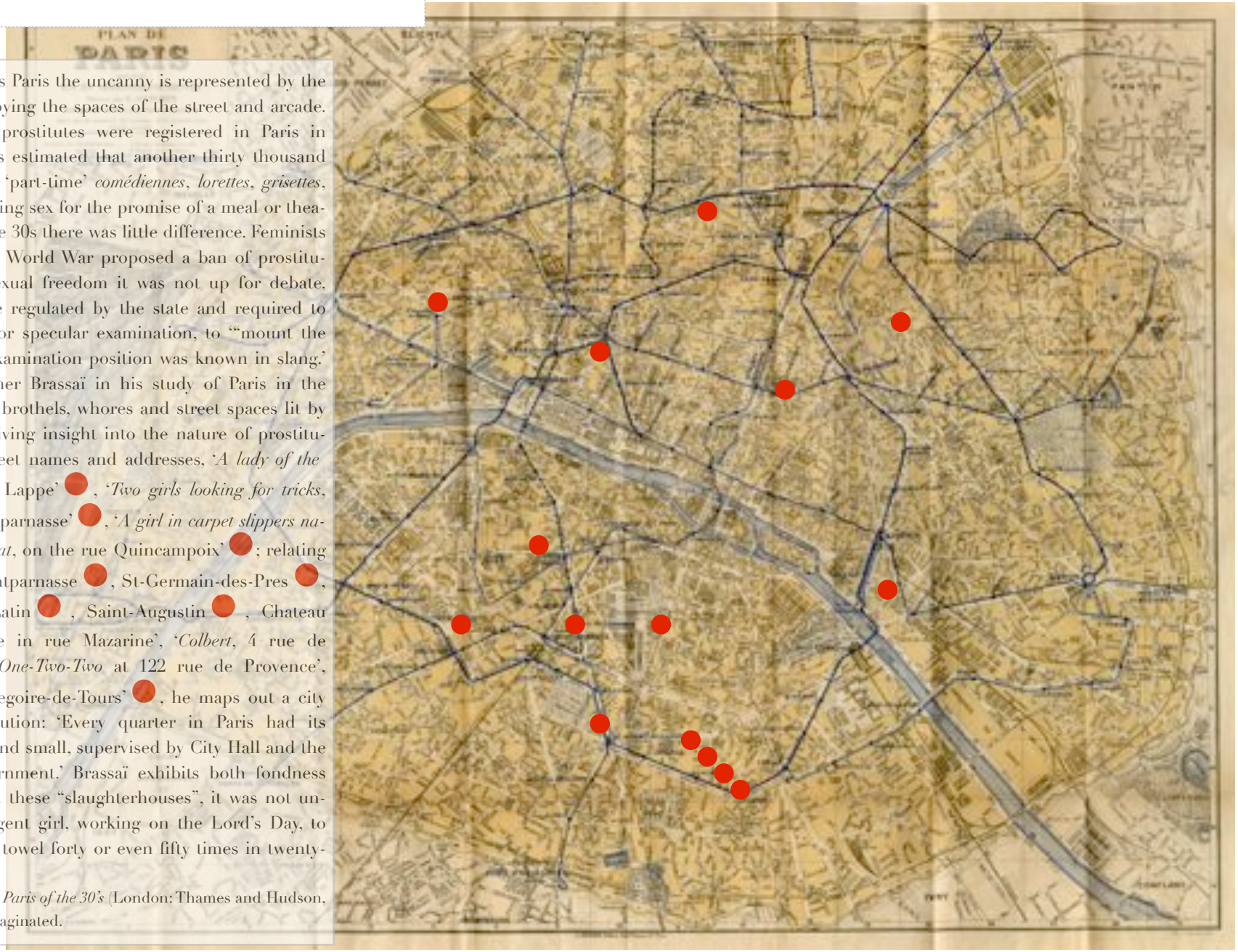


Plate 82: *Plan de Paris* by L. Guilman, annotated to show locations of brothels, 2008.

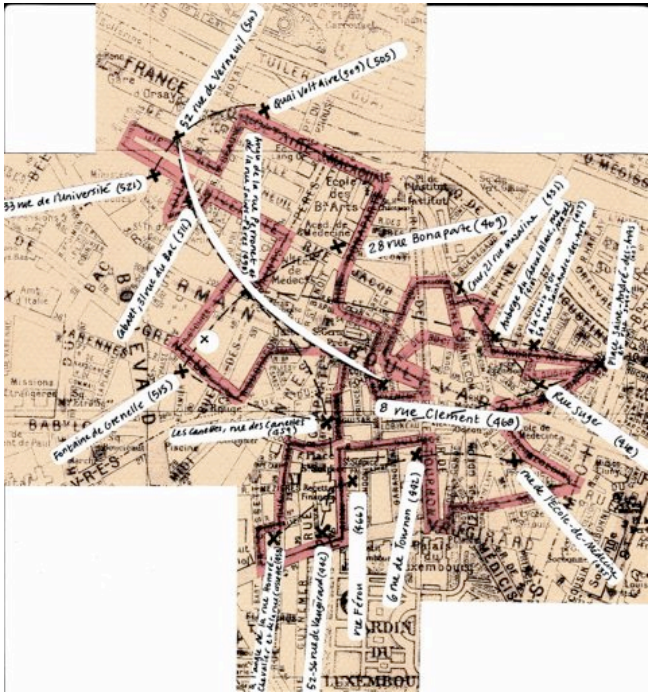


In 1920s and 30s Paris the uncanny is represented by the prostitute occupying the spaces of the street and arcade. Five thousand prostitutes were registered in Paris in 1866, and it was estimated that another thirty thousand were unofficial, 'part-time' *comédiennes*, *lorettes*, *grisettes*, *cocodettes* swapping sex for the promise of a meal or theatre outing. In the 30s there was little difference. Feminists before the First World War proposed a ban of prostitution but like sexual freedom it was not up for debate. Prostitutes were regulated by the state and required to report weekly for specular examination, to '"mount the camel" as the examination position was known in slang.' The photographer Brassaï in his study of Paris in the 1930s wrote on brothels, whores and street spaces lit by hazy gaslight, giving insight into the nature of prostitution. Giving street names and addresses, '*A lady of the evening*, rue de Lappe' , '*Two girls looking for tricks*, Boulevard Montparnasse' , '*A girl in carpet slippers naked under her coat*, on the rue Quincampoix' ; relating brothels in Montparnasse , St-Germain-des-Pres , the Quartier Latin , Saint-Augustin , Chateau d'Eau ; 'five in rue Mazarine', '*Colbert*, 4 rue de Hanovre', '*The-One-Two-Two* at 122 rue de Provence', '*Suzy*, 7 rue Gregoire-de-Tours' , he maps out a city through prostitution: 'Every quarter in Paris had its brothels, large and small, supervised by City Hall and the municipal government.' Brassaï exhibits both fondness and critique: 'in these "slaughterhouses", it was not unusual for a diligent girl, working on the Lord's Day, to pick up a clean towel forty or even fifty times in twenty-four hours.'

Brassaï, *The Secret Paris of the 30's* (London: Thames and Hudson, 1976[1931-9]), unpaginated.

Plate 83: Plans of Paris mapping Duchamp's addresses, and several walks around 1920s and 30s points of interest, 2007.

Plate 84: Double-sided plans of Paris mapping Duchamp's addresses, and several walks around 1920s and 30s points of interest, 2007, pencil, photocopies, red stickers, pinprick holes and cuts on watercolour paper and yellow card.



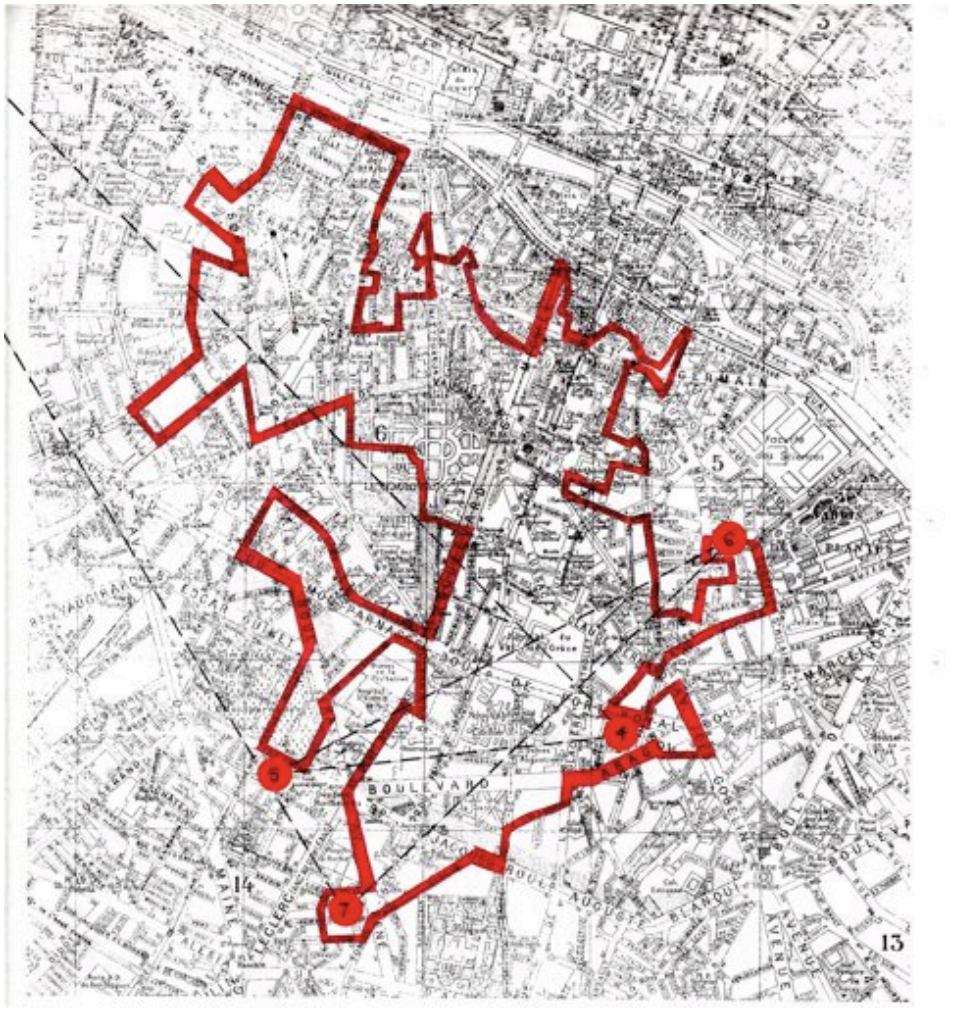


Plate 85: Double sided circular map of Paris mapping Duchamp's addresses, and several walks around 1920s and 30s points of interest, 2008, pencil, photocopies, red stickers, pinprick holes and cuts on watercolour paper.

House

Paris, then, was an outdoor city. Little affected physically by the First World War, in the 1920s it perpetuated freedom and hedonism for some, while restricting others.[57] In particular, conservative nationalistic values increasingly existed against creative liberal ones. For women, active support for sexual freedom, spatial and reproductive confinement lessened. Birth control services were available through surreptitious knowledge, yet pronatalism reinstated the illegality of and increasing penalties for use of contraception or abortion.[58] These opposing values indicate Paris was publicly a space of debate and change.

Haussmann's rebuilding programme had brought many small businessmen financial profits. Annie Dalsace's father, Edmond Bernheim, a property developer, was one such. His wealth enabled the purchase of the original building transformed by the Dalsaces into a glass house and clinic dedicated to the health of the female body. The *Maison de Verre* was, as such, a symbol of modernity placed into the publicity, politics and culture of the city I have described. The original site, though – an eighteenth century *hôtel* in a secret courtyard, concealed from the narrow street of rue Saint-Guillaume – seems more associated

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[57] See Hazan, *The Invention of Paris* (2010); Horne, *Seven Ages of Paris* (2002); Hussey, *Paris* (2006). Harvey, *Paris, Capital of Modernity* (2003); Zeldin, *France 1848–1945* (1973–81); Eugen Weber, *The Hollow Years: France in the 1930s* (London: Norton, 1994).

[58] See 'Background' and sources describing this situation: Léon Blum, *Marriage* [1907], (*Du Mariage* [1907]), (London: Jarreds, 1937); Dr Madeline Pelletier, *Le Droit d'avortement* (Paris, 1913); Bernard Lecache, *Séverine (Caroline Rémy)* (Paris, 1930); Jacques Bertillon, La dépopulation de la France (Paris, 1911); Paul Leroy-Beaulieu, *La question de la dépopulation* (Paris 1913); Robert Michels, *Sexual Ethics: A Study of Borderland Questions* (London, 1914); Eugène Brieux, *Maternity. A Play in Three Acts* [1904], (trans.) Mrs. Bernard Shaw (London: Standring, 1907); Dr. Minimie [Dr Lutaud], *Le néo-Malthusianisme* (Paris, 1891); Émile Zola, *Earth* (*La Terre,* [1887]) (New York, 1975), 98–100. For analyses of the situation see McLaren, 'Abortion in France' (1978), 461–485; and Angus McLaren, *Sexuality and Social Order: the Debate Over the Fertility of Women and Workers in France, 1770-1920* (London: Holmes & Meier, 1983).

with ‘Old Paris’ than new. Like the modern *maisons de rendezvous*, the clinic’s location may have been known amongst certain circles, but was not publicly acknowledged. Its services, I surmise, would have been costly.[59]

Glass architecture was admired by Benjamin for having ‘rooms in which it is hard to leave traces’.[60] Three years later, a 1936 American article proposed, in the ‘Science and Medicine’ section, that glass block houses would soon be available to all, as the pinnacle of modern living. The article claimed ‘the fluted interior of the blocks [of glass] will give a diffused light throughout the house’. Most importantly, its wipeable glass surfaces would be dust free.[61] Benjamin’s ‘traces’ indicated the outmoded bourgeois past, threatening modernity: ‘Plush as dust collector,’ he wrote, ‘Mystery of dustmotes playing in the sunlight and the

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[59] See also ‘Glass’. Public medicine, although apparent in France from the early 19th century, was enshrined as a welfare state in 1945. See Ann F. La Berge ‘The French Public Health Movement 1815–1848’, in *Proceedings of the Annual Meeting of Western Society for French History* (December 4–6, 1975), 337–353. Also see Karen Offen, ‘Body Politics: Women, Work and the Politics of Motherhood in France 1920–1950’, in Gisela Bock and Pat Thane (eds.), *Maternity and Gender Policies: Women and the Rise of the European Welfare States, 1880s–1950s* (London: Routledge, 1991), 138–159. Timothy Beresford Smith argues that the welfare state of 1945 came out of ‘mini-welfare states’ in existence from 1928, Timothy Beresford Smith, *Creating the Welfare State in France 1880–1940* (Quebec: McGill-Queens University Press, 2003), 4.

[60] Walter Benjamin, ‘Experience and Poverty’, [1933], (trans. Rodney Livingstone), in Benjamin, *Selected Writings Vol. 2, 1927–34* (London: Belknap Press, 1999), 731–36. Paul Scheerbart’s glass architecture manifesto, referred to in ‘Background’, was taken up by Benjamin as well as Giedion and Le Corbusier. Benjamin tempered his acclaim for glass, identifying the modernist glass and steel constructions as ‘barbaric’, with no ‘aura’, and comparing the metaphoric idealism of glass to the disturbing trajectory of fascism.

[61] ‘Glass Houses Plus Privacy’, in *The Literary Digest*, (January 18, 1936), 29–30. Further, due to a new spun glass wool material ‘the housewife may wear a glass dress, have glass rugs and sleep on glass mattresses.’

"best room"'.[62] Further, as Alain Corbin demonstrates, dust was associated with germs threatening the hygiene of the home.[63] Ironically, glass buildings, seeking to eliminate traces, do exactly the opposite: glass is a dust collector. Challenging its lauded transparency, alongside its inherent reflectivity and translucency it attracts dust due to its positive triboelectric qualities.[64] It requires constant cleaning and polishing to maintain its clarity.

What, for Duchamp, was an encapsulation of the body's erotic emissions becomes an offensive inconvenience in a glass home. The 'Nevada' lens showed a neat ability to collect dust within its concave surface, perhaps curtailing its future use. Particles are also caught forever in the pocks of its recycled glass. The *Maison de Verre's* interior, constructed from numerous materials and details, created hundreds of corners, indents and a huge surface area for particles to collect on. It also included curvaceous upholstered furnishings, nineteenth century kinds of dust collectors in their own right. Dust lingers in the cracks and joints, dried as flecks and adhered to corners and margins. It exists as whirling silvered specks lit up in the air, as dark hairy dustballs under the chairs, and flesh-like particles in the glass concavities.

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[62] Benjamin, *The Arcades Project* (2002), [D1a,3], 103. Benjamin then quotes '"Shortly after 1840, fully padded furniture appears in France, and with it the upholstered style becomes dominant" Max von Boehn, *Die Mode in XIX. Jahrhundert*, Vol. 2 (Munich, 1907), p. 131.' Citing Julius Meyer he says: 'one chokes and gasps anxiously for breath'. [E2a,3],125.

[63] Alain Corbin, *The Foul and the Fragrant* (Cambridge: Berg, 1986), and Robert L. Frost, 'Machine Liberation: Inventing Housewives and Home Appliances in Interwar France', in *French Historical Studies*, 18/1 (Spring, 1993), 227.

[64] Jiri George Drobny, *Polymers for Electricity and Electronics: Materials, Properties, and Applications* (John Wiley: Hoboken, 2012), 4.

The gynaecology clinic must have challenged the ideals of glass architecture even more. In the 1860s, doctors estimated that 80% of women suffered from gynaecological 'diseases' – 'leucorrhea', 'metritis, ulcerations, inflammations, tumours and haemorrhages, often from the use of amateur contraceptives, usually inserted pessaries and devices'.[65] These conditions produce extraneous corporeal material: fluid, cells, skin, blood, bacteria. They are messy, as is childbirth, abortion and other surgical removals. Continuing well into the twentieth century, these diseases would have given the newly emergent profession of gynaecology much to clean up.[66] Removing threatening, dried smears to the travertine, paint, linen, rubber and glass surfaces of the two clinical rooms at the *Maison de Verre* would be necessary to remove the traces of disease.[67]

Dust is anti-body and anti-architecture. Of the body and its architecture, yet no longer their form, it threatens their status. Body in French, *corps,* can also mean corpse or remains. The house is a collector of shed bodies – miniature fragments of death. Live body and corpse coexist. Dust physically recoats the materials of a room with its own materials, suffocating, dirtying and decaying them. The *Maison de Verre's* surfaces – glass, rubber, travertine, paint, steel, textiles – are all touched by a skin of dust. This fleshy dust is part of the contradiction at the heart of the *Maison de Verre*, a challenge to the hygienist aspects of its own programme. Although posited as a thoroughly 'modern' project, the perva-

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[65] See Dr Louis Seraine, *De la santé des gens mariés* (1865), 136; Dr F. E. Bergeret, *Des Fraudes dans l'accomplissement des fonctions génératrices. Dangers et inconvénients pour les individus, la famille et la societé* (1868), both cited in Zeldin, *France 1848–1945* (1973), 303.

[66] As discussed in 'Background', gynaecology became a discipline in 1890.

[67] Joseph Lister had little effect on medical practices until the 1930s. See Ann Dally, *Women Under the Knife* (London: Hutchinson Radius, 1991), 139.

siveness of the corporeal may have contributed to its rejection from the modernist architectural canon. Not only a 'homogeneous' interior full of soft furnishings but one which uncannily over referenced the body.[68]

Cleaning and Modernity

In the early twentieth century, modern architectural forms and materials meant that dust became increasingly visible. What was previously an inevitable layer circulating through clothing, draperies, carpets, furnishings, on mirrors, mantles, ornaments – shifted ineffectually around from place to place by domestic servants – became of identifiable quality and quantity, an object itself. As Joseph A. Amato argues, before scientific measure, dust was merely the smallest thing to exist. Once it could be viewed through a microscope, measured and quantified it became a collection of other things.[69] Synonymous with health, its removal was key to new definitions of hygiene, and modernity. By the 1920s cleaning was assisted, for wealthy families at least, by the invention of a commodity which epitomised modernity: the vacuum cleaner. In bourgeois homes, then, dust's modern definition became a response to its potential for removal.[70]

The vacuum cleaner was invented as early as 1860, with a mechanical version replacing the manual carpet sweeper in the early twentieth century. The

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[68] 'Homogeneity' is Kenneth Frampton's term. See Marc Vellay and Kenneth Frampton (eds.), *Pierre Chareau: Architect and Craftsman 1883–1950* (London: Thames and Hudson, 1985), 242.

[69] Amato, *Dust* (2000), 2.

[70] Different standards marked out class difference. See Corbin, *The Foul and the Fragrant* (1986), 228; and Frost, 'Machine Liberation' (1993), 115.

Figure 5.11: 1922 Vacuum cleaner by Montgomery Ward.

early French *aspirateur* of 1903, was a large chariot requiring two men to utilise.[71] In 1907 the first arguably 'portable' electric machine was invented by James Murray Spangler. William Henry Hoover subsequently developed Spangler's idea with disposable bags and an upright machine following soon after [figure 5.11].[72] Later French designs followed those already developed in America,[73] and were marketed as magical devices, both labour saving, and promising higher quality cleaning [figure 5.12]. Robert Frost argues that in France, general 'domestic mechanization', though, was slow to catch on. Ownership of a vacuum cleaner was a mark of prosperity, as according to Frost, an 1928 an ordinary vertical vacuum cleaner cost 855 francs.[74] Further, in the 1920s only 14% of Parisian homes had electricity.[75]

Housekeeping

The architecture of the *Maison de Verre*, centred around corporeal emissions and attracting dust to its multitude of surfaces implied an ongoing challenge. The cleaning maid becomes a key protagonist. Springing from ideas of invisibility, she must keep the skin, fluid, smears and blood, signifiers of bodily decay and sexual-

[71] Sigfried Giedion, *Mechanization Takes Command*: *A Contribution to Anonymous History* [1948] (New York: Norton, 1969), 587. Also pages 586–595.

[72] See David John Cole, Eve Browning and Fred E. H. Schroeder, *Encyclopedia of Modern Everyday Inventions* (London: Greenwood, 2003), 252. This was exceedingly heavy and unwieldy weighing 18kg.

[73] Frost, 'Machine Liberation' (1993), 128.

[74] Frost, 'Machine Liberation' (1993), 124. According to Sohn, in 1929 a washing machine cost 700 francs. Sohn, 'Between the Wars in France and England', (1994), 103.

[75] Mary McLeod, 'New Designs for Living: Domestic Equipment of Charlotte Perriand, Le Corbusier and Pierre Jeanneret 1928–1929', in Mary McLeod (ed.), *Charlotte Perriand: An Art of Living* (New York: A. N.Abrams, 2003), 64.

ity, out of sight. She herself must remain out of sight. Accordingly there exist no references to the role of the domestic servant at the *Maison de Verre*.

Some social research studies in the early twentieth century attempted to map the employment of servants. In 1906 it was evaluated that 11% of the population of Paris were domestic servants, 63% of whom were women.[76] This was to change quite markedly post war. In the 1920s, thinkers like Paulette Bernège promoted modernising the running of the home through technology. This and the decline in private income after the war led to a reduction in servants to bourgeois households.[77] Further, servants were portrayed as lazy, expensive and promiscuous, better replaced by appliances.[78]

It is not known how many servants were employed at the *Maison de Verre*, or which appliances were available, but as said earlier, there appears to have been only one live-in servant whose role was housekeeper. It is thought she lived there at some point with her husband, the family chauffeur. Post-war changes implied that the role of a single live-in servant would be more

Figure 5.12: *L'Art ménager*, January 1928. Back cover. Archives nationales Centre national de la recherche scientifique.

[76] M. Cusenier, *Les domestiques en france* (Law Thesis, Paris, 1912), 17; Theodor Zeldin, *France 1848–1945: A History of French Passions, Vol. 2* (Oxford: Clarendon Press, 1977), 943.

[77] Paulette Bernège, *De la methode ménagère* (Paris, 1928). See Jackie Clark, 'Homecomings: Paulette Bernège, Scientific Management and the Return to the Land in Vichy France', in Simon Kitson and Hanna Diamond (eds.), *Vichy, Resistance, and Liberation: New Perspectives on Wartime France* (Oxford: Berg, 2005), 139–156. See also Anne-Marie Sohn, 'Between the Wars in France and England', in Françoise Thébaud (ed.), *A History of Women in the West V. Toward a Cultural Identity in the Twentieth Century* (London: Belknap, 1994), 100.

[78] Jacques Herbé, 'Le Salon des Arts ménagers', in *La Maison* (December 1925); Guerquin de Monsegou, 'Denise, ou lart d'organiser judicieusement sa maison', in *L'Art ménager* (February 1934), 74–75, 220–21; Léon Bizard, 'La Syphilis et les domestiques', in *Bulletin de la Société française de prophylaxie sanitaire et morale* (March, April, July 1923); Frost, 'Machine Liberation'(1993), 109–130.

Figure 5.13: Pierre Chareau, *Maison de Verre*, 1928–32. Black lacquer broom cupboard under the stairs circled. Photograph Emma Cheatle, 2009.

encompassing.[79] A vacuum cleaner was marketed on the assumption that she, or the housewife, could perform more tasks. In the next section of this chapter I demonstrate that the layout of the house, with the servant's functional spaces along one edge, suggests that the housekeeper was connected to most tasks in the house, including washing and ironing laundry, with the possible help of a daily cleaning maid. An ample circular freestanding broom cupboard is centrally positioned in the house, beneath the stair to the second floor [figure 5.13]. Measuring a metre in diameter, it was large enough to house a vacuum cleaner, and the house had electricity throughout. With a housekeeper and her appliance in charge, the mistress of the house was released to continue her social role in the home [figure 5.14].

It has been argued that vacuum cleaners and other appliances served to 'proletarianise' the servant as the sole worker, enslaving her to the increased task of cleaning the house, alone, to even higher standards.[80] One fears as much for the housekeeper at the *Maison de Verre*. An invisible occupant of the house, her job, to keep at bay dust and smears, was never ending. A vacuum cleaner may have kept her at arm's length from the first layer of dust, but a house as spatially and materially complex would have required labour intensive efforts.

Its different zones and materials create a vast and intricate surface attracting different emissions. As suggested, dust resided in lenses, rugs, tapestries

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[79] Leslie Page Moch, 'Men and Women in Paris, 1870–1930', in Marlou Schrover and Eileen Yeo, *Gender, Migration and the Public Sphere, 1850-2005* (Abingdon: Routledge, 2010), 38–53. Although it is not clear what happened to the women previously employed as live-in domestics, Theresa McBride, *The Domestic Revolution* (London, 1976), 36, 111, suggests that they maintained their numbers as day servants.

[80] See Ruth Schwartz Cowen, 'The Industrial Revolution in the Home: Household Technology and Social Change in the Twentieth Century' in *Technology and Culture*, 17 (1976), 1–23.

and perforated screens; excreta was walked onto the lower floors; blood, pus and other messy corporeal materials were splattered on clinical surfaces and fabrics; soap residues coated baths and bidets. Endless vacuuming, brushing, dusting, scrubbing, wiping, disinfecting and polishing would have been necessary to remove the clues to the mystery of its daily business. The housekeeper's work though, unlike that of the detective who solves a mystery, was to remove without asking questions and maintain the seemliness of the household.

Figure 5.14: *L'Art ménager*, February 1932. Archives nationales Centre national de la recherche scientifique.

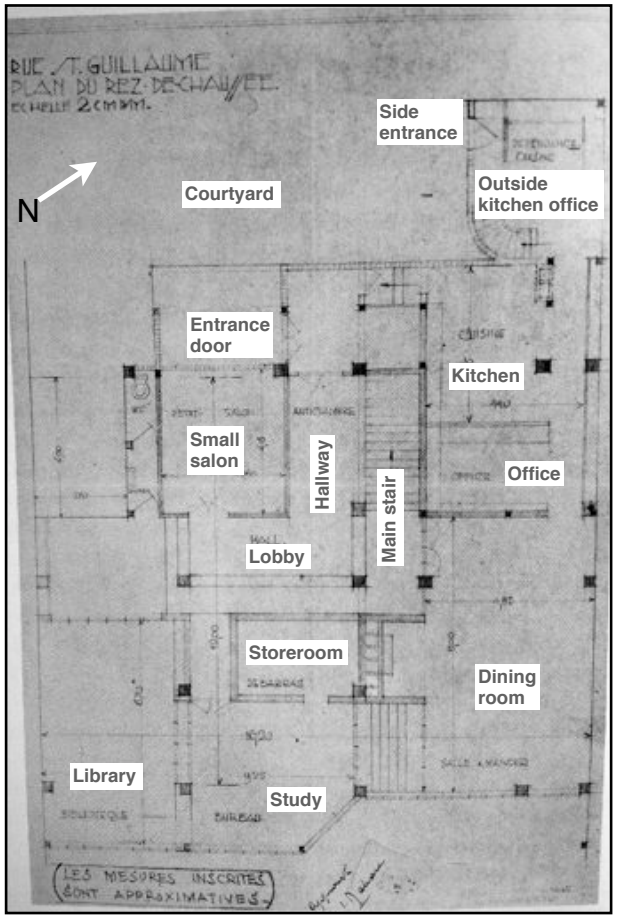
> 'Dust is the immutable, obdurate set of beliefs about the material world, past and present, inherited from the nineteenth century, with which modern history-writing attempts to grapple; Dust is also the narrative principle of that writing; and Dust is the joke.'[81]

If we accept that most of what actually happens in the past has been lost, reduced to dust, or is inscrutable, the true significance of the *Maison de Verre* remains unknowable. The building's archival materials, consisting of a few drawings and notes, are scant, and, seen today, the spaces are initially mute. Yet, buildings are readable as a manifestation of the hidden past. The female bodies of the clinic and house may now be absent yet we know they were there, and by scrutinising the plans, spaces and materials we can guess at their ghostly circulations. The remainder of the chapter then works between evidence and informed imagination to write these female occupants into being, and, at the same time, to understand the house through their presence. It also accepts that what is written, no matter how well researched, will always partly be a speculation, a story.

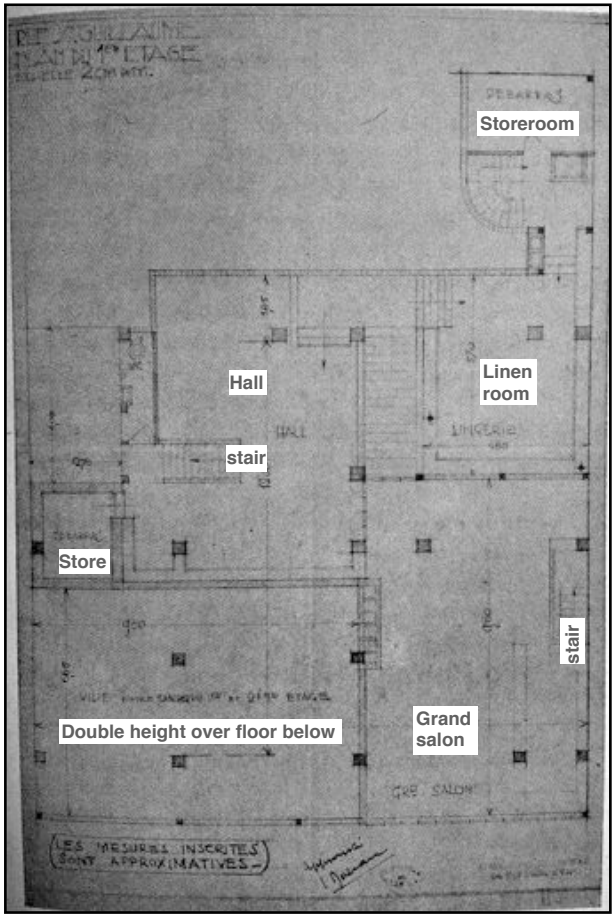
[81] Steedman, *Dust* (2001), ix.

Plate 86: 1927 plans of the *Maison de Verre.* Original plans published in Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992), 30 31. Re-annotated, 2010.

GROUND FLOOR



FIRST FLOOR



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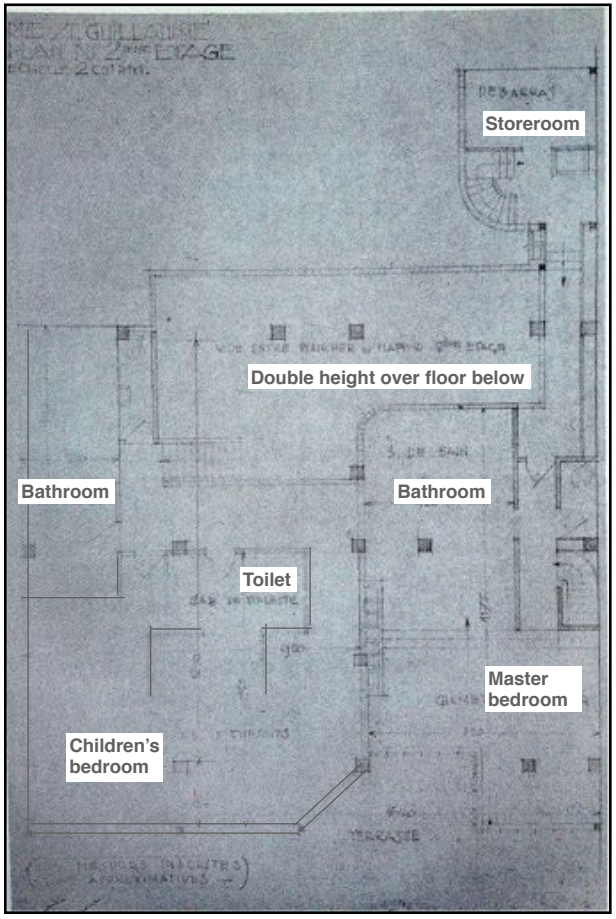
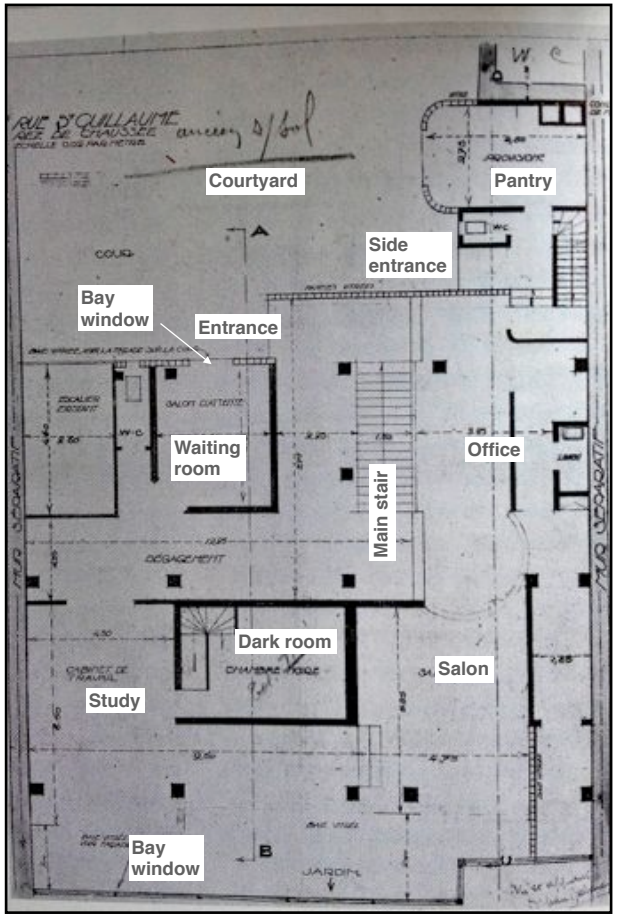
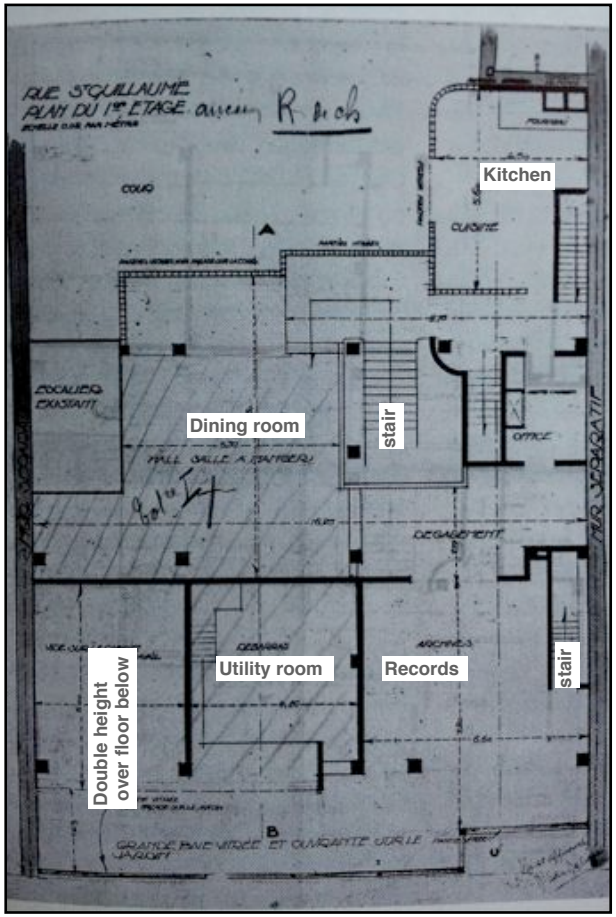


Plate 87: 1928 plans of the *Maison de Verre.* Original plans published in Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992), 30 31. Re-annotated, 2010.

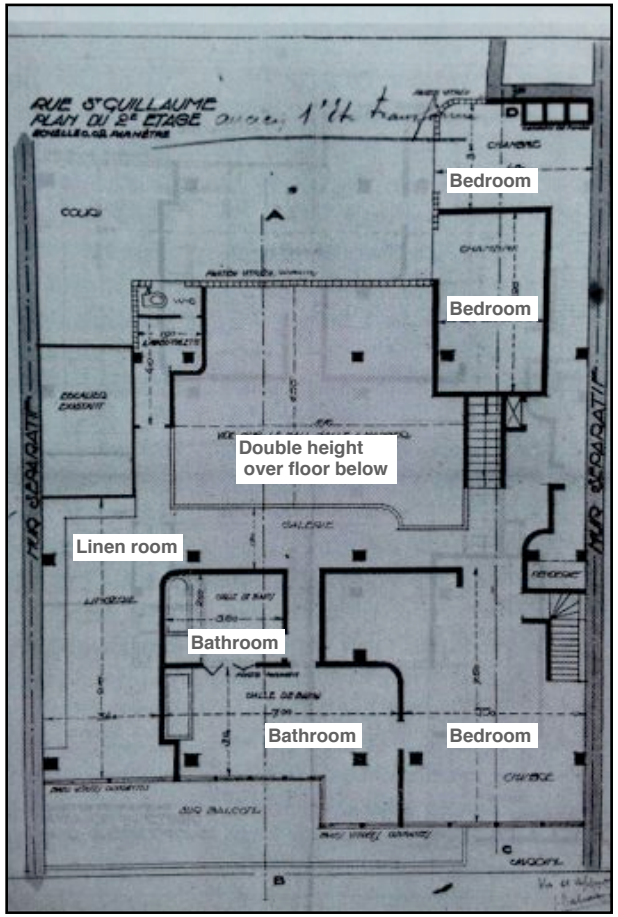
GROUND FLOOR



FIRST FLOOR



SECOND FLOOR



Plans

If dust equates with the idea of an archive, it signifies both its literal dust, collected as deposits of the 'past', and a critique of the primacy the archive is afforded.[82] There is no official archive to the *Maison de Verre*. The surviving design drawings and notes describing Chareau's intentions are few: two sets of sketch plans from 1927 and 1928 [Plates 86 and 87]; a sketch perspective of the kitchen areas published in 1933 [figure 5.24]; and some strange perspectives from 1929 [figure 5.17].[83] Although these drawings have been published, they have not attracted much discussion. I have, though, scrutinised the plans in detail, and they suggest an interesting narrative on the design process.

The architectural drawing is a kind of skin of a building. It indicates the future, and is left behind. Chareau's first sketches, the 1927 plan drawings [Plate 86], are made in a faint pencil line, as if uncertain. Exterior walls are drawn as glass lenses or blocks, as are some of the interior. Despite the existence of heavy structural columns indicating a free-plan approach, the ground floor plan shows a set of interlinked rooms staggered off an *antichambre* (hallway) as central circulation – a conventional layout owing something to the mid nineteenth century bourgeois apartment plan [figures 5.15 and 5.16].[84] The *cuisine* (kitchen), *salle à*

[82] See Steedman, *Dust* (2001), 70, ix.

[83] The plans are published in Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992), 30–31; perspectives and sketch in Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 83, 117. See also Bijvöet drawing, figure 2.7.

[84] These figures can be found in Jacques Fredet, *Les Maisons de Paris: types courants de l'architecture mineure parisienne de la fin de l'époque médiévale à nos jours, avec l'anatomie de leur construction, Volume 2 (Planches)* (Paris: Éditions de L'Encyclopédie des Nuisances, 2003), Planche 120: Type 3, 197 Bd Saint-Germain; Planche 125: Type 3A, 72 Bd de Sébastopol. The *hôtel* layout at 197 Boulevard Saint-Germain shown is by Charles Garnier circa 1860. This incorporates no. 195, the apartment building occupied by the Dalsaces until 1932.

Figure 5.15: Planche 120: Type 3, Hôtel de Mr. G. Hachette et Maison à Loyer, 197 BD SAINT-GERMAIN (PAR M^{R}. CHARLES GARNIER, ARCH^{TE}. MEMBRE DE L'INSTITUT. [Rooms: 4 main stair; 6 'back' stair; 7 antichambre; 8 salons; 9 salle à manger; 13 chambres (bedrooms); 14 offices; 15 salle de bains; 16 servants; 17 cuisine].

Figure 5.16: Planche 125: Type 3A, MAISON, 72 BD DE SÉBASTOPOL, M. Rolland, Architecte. (From Paris Caudrillier, Editeur, Boulevard Saint Martin, 19.)

manger (dining room), and a small *bureau* (study), link to a *bibliothèque* (library) and *débarras* (storeroom) for Dr Dalsace. No medical suite as such is drawn. An enclosed *petit-salon* (small salon) is positioned at the front where the surgery is in the final building. Two *offices* which are perhaps pantries or servant eating areas are positioned on the north edge of the plan with a separate side entrance for servants. There are no live-in servant spaces apparent.

The main stair leads up to the first floor, and splits one way to a large *hall* leading to a *grand salon*; and the other way to a *lingerie* (laundry or linen room) and storage. The *salon* and *hall* each has a small stair up to the second floor. From the *hall* stair, a children's wing consists of a *salle d'enfants* (bedroom) and *salle de bains* (bathroom). From the *salon*, an interlinked *chambre à coucher* (master bedroom) and *salle de bains* (bathroom) are reached. This creates complete separation of children from parents. Two double height spaces are proposed: over the linked library and office on the ground floor; and the *hall* and the linen room, of all places, on the first floor. The *grand salon* is curiously not double height. Spaces are staggered in plan and suggest a sense of interplay of space. There is a hint of rotational sequencing but, despite the double height spaces, none of the organisation and hierarchy of the final plan.

The plans from 1928 are bolder yet only slightly closer in layout to the final building [Plate 87]. Glass lenses or blocks now only appear on the front façade, which is stepped around the interior rather than a floating plane. The placement of columns is similar to the eventual layout, although they retain their presence on the second floor and appear as solid square sections. Curved, almost art-deco, corners are seen on several rooms. The rear façade appears to be transparent glass. These plans hint at something other than domestic function occurring in the house with a *salon d'attente* (waiting room) on the ground floor where the *petit-salon* was in the previous plan. This room has a *baie vitrée*, bay

window of transparent glass, overlooking the courtyard. From here a *cabinet de travail* (study) extends to the back of the house with a separate curious small enclosed room, a *chambre noire* (dark room). The rear of the ground floor, the eventual waiting room, is a small *salon*, the only one in the house. It is completely open to the *cabinet de travail*. The main stair, positioned as it is now, reaches the first floor. A large *hall salle à manger* (dining room) is located where the *salon* is today.

The rear part of the first floor is dedicated to a large room for *archives* (records) and a large interior *débarras* (utlility or storeroom). Two small stairs ascend to the first floor. One leads to two small bedrooms at the front, presumably for the children, with a large master bedroom, two bathrooms and huge *lingerie* (laundry room) at the back. The other, from the *archives*, leads into the master bedroom. Again there are no live-in servant spaces, and an incoherent separation of bedrooms and daily service areas exists. Double height spaces with overlooking galleries are proposed over dining and main stair on the first floor, and over the doctor's *cabinet de travail* on the ground floor. The layout still appears muddled with little of the final organisation.

Dark room

The final layout of the *Maison de Verre* was quite different from these early plans. The intentions of the 1927 and 1928 drawings, with no accompanying sections, notes or three-dimensional drawings, remain elusive. Mechanical and sanitary innovations are absent – both plans include three toilets but no bidets. Even the later strange empty perspectival drawings from 1929 bear little relationship to the end product [figure 5.17]. Walls in the early plans are heavily defined with no sliding or rotating. The size and relative scale of the spaces, sense of containment and the connections between rooms are disorganised – it is hard to read how this

Figure 5.17: Pierre Chareau, Perspectives, 1929. From Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 83.

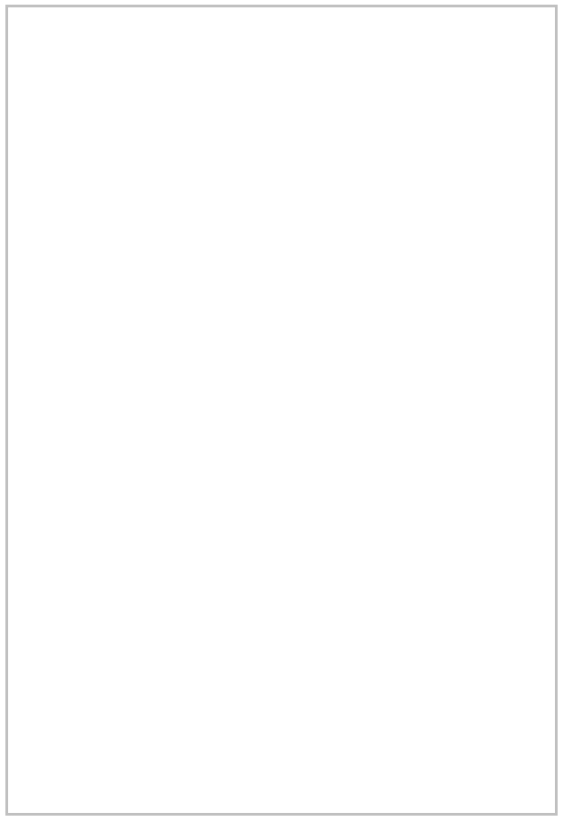


Figure 5.18: Interiors of uterine cavities. Note presence of gynaecological instruments. Jean Dalsace, *Gynecologic Radiography (Including Radiography of the Breast),* (trans.) Hans Lehfeldt (Hoeber-Harper, 1959), 52, 6.

building would have been occupied and experienced by the family, servants and patients. An understanding of how their various bodies would interact seems absent.

A critical intent, though, can be identified in the inconsistencies between the 1928 plans and the final layout. As outlined, the 1928 plans include a strange *chambre noire* on the ground floor, measuring 4.7 x 2.8m, from which an internal stair leads up to a *débarras* (utility/storeroom) twice the size on the first floor. This sits next to a large 6.6 x 7.2m *archives* room. *Chambre noire* translates as 'dark-room', or 'a dark room'. It is unclear which it is, and as it is reached directly from Dr Dalsace's work space it could be either: a space for developing photographic negatives, or a hidden interior space requiring no light. The *debarras* and *archives*, occupying a huge area of the plan [approximately 69 square metres], seemingly dedicated to the collection of records, to memory, are not included in the final house. My supposition is that all three of these spaces were labelled as such for the purposes of a planning application in 1928 just before work started on site in July.[85] The Dalsaces could not afford to be overt about the inclusion of the clinic to the authorities so the rooms intended for its use were coded on the plans. Dalsace was a proponent of the newly developed radiography and went on to research its benefits for gynaecology.[86] His experiments exposing the interior of the body required blackout [figure 5.18, 5.19]. The resultant images recall those of the *Large Glass* as negative [figure 2.16] and Man Ray's rayograms [figure 5.20]. The dark room, then, could have been intended as an x-ray and examination room, and the *archives* and *débarras* as other medical spaces. The records of the

[85] Permission to build the proposed 1928 plans was received just after the building work had started. See Taylor, *Pierre Chareau* (1992), 28.

[86] Jean Dalsace, *Gynecologic Radiography (Including Radiography of the Breast),* (trans.) Hans Lenfeldt (Hoeber-Harper, 1959).

archives do not exist, substituted as they are by the bodies of the women themselves visiting the clinic.

If the archive and dark room were indeed stand-ins for the clinical rooms to distract the authorities, they indicate the siting of the non-domestic female body in the house. In the end the clinic housing them was not only secreted into the interior, but is also overlooked by and integrated into it, with the entrance, and ground floor continuous and largely open plan. Only the final examination and surgical rooms are not overseen by the other occupants inside the house. In contradiction, the surgery with its glass wall to the front of the house is almost visible to the public outside. The examination room, then, is the only truly interior room – dark room – of the house [Plates 91, 92].[87]

Architecture as Archive

There is, as I have already mentioned, little further material on the building design and almost nothing which addresses the occupancy of it.[88] With no clinical archive, no records of conversations or practices, the building resists a socio-political analysis of its interior activities.

An absence of archival material may lead to several problems. The research subject can be marginalised or endangered by the absence of foundation material. In the case of the *Maison de Verre,* a lack of knowledge of Chareau's intentions or the building's life leads historian Kenneth Frampton to admit that 'it has in the main been left out of general works which discuss the Modern Movement […]. The reasons for this strange omission are not hard to find, because,

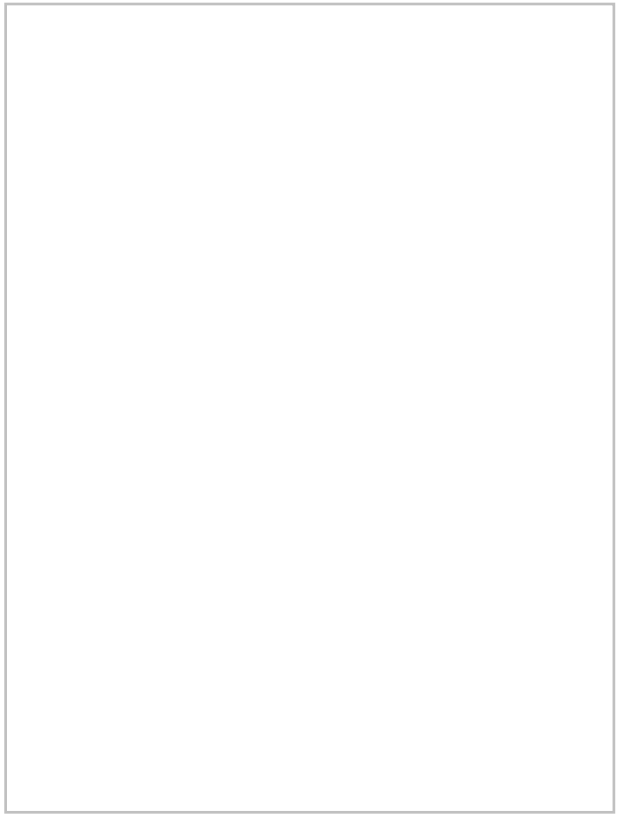


Figure 5.19: Interiors of uterine cavities. Note presence of gynaecological instruments. Jean Dalsace, *Gynecologic Radiography (Including Radiography of the Breast),* (trans.) Hans Lehfeldt (Hoeber-Harper, 1959), 37.

[87] A further internal room does exist: the Doctor's tiny telephone booth. I return to this in the next chapter, 'Air'.

[88] In contrast, extensive archives on Marcel Duchamp and his work are held at the Philadelphia Museum of Art, which I worked through in May 2010.

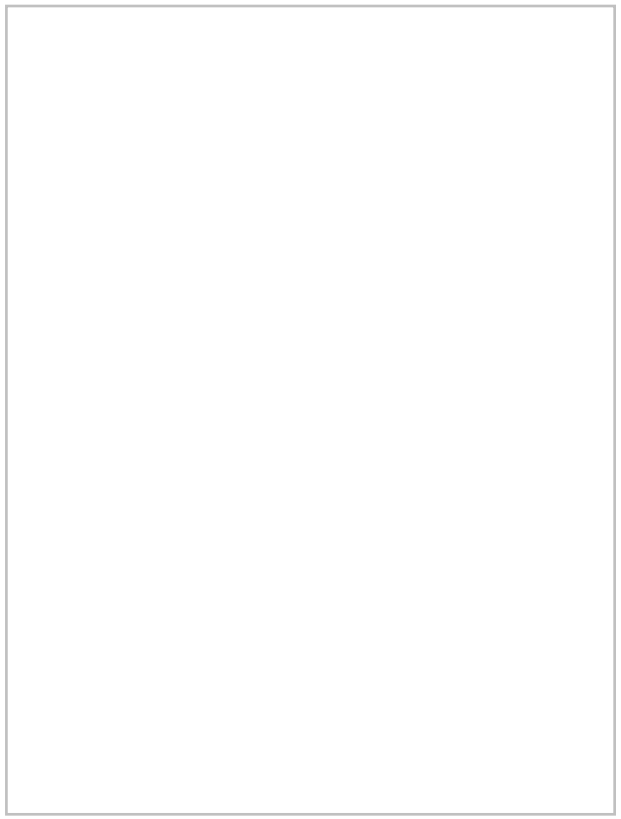


Figure 5.20: Man Ray, *Les Champs délicieux* (*Les Déclencheur retardeteur*), 1922. Rayograph. Kicken Gallery, Berlin.

while the Maison de Verre was both functional and machinist, it was *hardly a pure example* of these approaches.'[89] I believe that the deeper reasons for this 'omission' are a sense that issues of sexuality, gynaecology and maternity are inappropriate in a modernist domestic architectural programme.

The absence of archival material can also perpetuate speculation alone, guided by fashion or taste. On the other hand, viewed as necessary for 'proper' interpretation of history the archive can lead to entrancement, fetishisation even. Potentially a rigid definition of a historical subject and its pertinence is propagated.[90] Yet, if, as I have shown, the archive is already selective and partial, history writing is always an interpretation.

Steedman suggests that, 'documentary evidence, collected together in a particular kind of place', on a particular kind of place, is not necessarily the only way of practicing history.[91] My response to the partial collection of evidence available is to rethink what the limits of an archive might be. At the *Maison de Verre* the final layout appears now as an undrawn and unannotated space. A dialogue begins between it, its implied yet absent design drawings and the 1928 drawings. In place of other papers gathering dust, the changes between the layouts indicate the relationships between and positioning of programmes becoming clearer. The

[89] Frampton, 'Pierre Chareau' (1985), 242, my italics. Frampton himself left the building out of his influential history textbook, Kenneth Frampton, *Modern Architecture: A Critical History* (London: Thames and Hudson, 1980, 1985).

[90] Steedman, *Dust* (2001), ix–x.

[91] Steedman, *Dust* (2001), x.

differences suggest an unusual kind of synthesis was occurring between client, architect and fabricator using conversation and demonstration.[92]

In the place of a traditional archive, I propose the building itself as a collection of dusty 'documents', skins and surfaces ingrained with dust.[93] It holds its own evidence: it is a spatial archive in itself and of itself, housing various bodies. Its materials are old documents to be touched, scrutinised. A potential crime scene in the context of the illegality of birth control and abortion in the 1920s and 30s, the spaces are the sole surviving witnesses to possibly unlawful events, as well as everyday sexual, domestic and political occurrences.

The final house combined diverse materials, programmes and functions, resulting in an organised household with a hierarchy: clinic to the ground floor, living to the first and bedrooms to the second. Despite this, the final interior was a complex, layered and fluid space with interiors to interiors, linings, sliding doors, curves, rotational and staggered spaces, unpacked by striking views between rooms and floors, all contained by an external floating translucent skin. The linings and interior pockets – perforated and soundproofed metals, rubber flooring, sliding doors, curtains, little internal rooms and secretive corners – plus Chareau's curvaceous upholstered and soft brown leather furniture, all hand crafted, explain Frampton's feeling that it was 'obsessional and superfluous' explored in 'Background'.[94]

The surfaces of architecture, skin-like themselves, not only envelope those of the body, but go on to be affected by them. With its casings and dust

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[92] See Futagawa (ed.), *La Maison de Verre* (1988), 16. The process of building was accumulative, with problems and inconsistencies of design resolved on site as work progressed.

[93] Steedman, *Dust* (2001), 7.

[94] Frampton, 'Pierre Chareau' (1985), 242.

covers for preserving traces, its shelves and items gathering dust, the *Maison de Verre* recalls Walter Benjamin's statement that the salon of the nineteenth century, a dust trap, was the perfect setting for a detective story.[95] The ingrained dust on these multiple surfaces, impossible to completely remove, becomes literally and metaphorically a clue to the presence of bodies. Dust, though, also reforms, re-makes an architecture in the miniature. As a skin, it takes a new shape against forms, moving away from the visual and becoming equated with touch, recalling Rosalind Krauss' term 'corporealize the visual'.[96]

As a house for the clinical female body, the *Maison de Verre* shed particular particles. Locating, touching these, suggests a new plan of lines and circulations, a new form of retrospective design drawing, a figure ground of dust which begins to reveal an alternative dust form of the building, as a reconstruction of the past [Plates 88, 89].

Dust Recovery

If dust is the body, it is also history. Skin was shed weeks, months, years ago, cast off onto floors, cills and into joints, collecting against glass and in the weave of fabrics, smeared onto walls, baths, light switches, sitting in cracks and corners, staining all manner of materials. Dust is likewise the history of the city. A trail of dust has been walked in from outside, carried on footwear, clothing, skin, and in

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[95] For instance, see Walter Benjamin, *Selected Writings, Volume 3 1935-1938*, (trans.) Rodney Livingstone (London: Belknap Press, 2002), 39. Dust traps like Jean Lurçat's tapestries appear throughout. A childhood friend of Jean Dalsace and, already admired by the Chareaus, Lurçat designed upholstery for screens, sofas and chairs, embroidered by his wife Marthe. See Vellay, *La Maison de Verre* (2007), 145; Taylor, *Pierre Chareau* (1992); Vellay and Frampton (eds.), *Pierre Chareau* (1985); http://www.chateau-gourdon.com/html/artdeco_Pierre_Chareau.htm.

[96] Rosalind E. Krauss, 'The Im/pulse to See', in Hal Foster (ed.), *Vision and Visuality* (Seattle: Bay Press, 1988), 60.

nasal passages and hair. This mixture of urban and corporeal dust, impossible to ever completely remove, circulates and ingrains. It could be years old, pertaining to something which has already passed, already happened. As such, the building potentially still contains the dust of all its visitors, as a continuous trace connecting the house now in the present to the inter-war city environment of the past. The house in the present is a receptacle of its past as compressed time. Its materials, coated with the film of their own dust, become a metaphor for a trace of human occupation of unrecorded and unknowable visitations and conversations.

Hence, history is dust in the making. As Teresa Stoppani notes, the nature of dust 'infiltrates materials'.[97] It corrupts them, turning them away from their original nature. The materials of the *Maison de Verre* date from the 1920s and 30s and have been eroding ever since. The glass is shattering under its own weight, the mechanisms for the sliding doors and ventilation systems are wearing out, and air is decomposing the rubber floor tiles, weathering the organic fabric of the building.[98] The interior of the building is a register of passing time. Its dust a sign of a building slowly decaying, turning backwards. Creating holes, gaps, a ruin, it is a metaphor for loss.

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[97] See Teresa Stoppani, 'Dust revolutions. Dust, informe, architecture (notes for a reading of Dust in Bataille)', in *Journal of Architecture*, 12/4, (2007), 439.

[98] At the *Maison de Verre* the present owner, Robert Rubin, is embarking on a slow, sensitive restoration, having to make certain decisions about where replacement is necessary over conservation of existing material.

The holes in the past, though, also allow the future. Steedman points out that: 'The archive is a record of the past, at the same time it points to the future'.[99] The *Maison de Verre* as an archive of dust suggests a 'project' as it forms miniature ruinous structures and pictures of its own. That is, as well as clinging to history it projects something new, to be reinterpreted.[100] Dust then, also signifies a recovery. Informed by contemporaneous written material, and informed research, the past can be imagined and reconstructed.[101] The seemingly now empty interior becomes a locus and structure for the possibility of recovering lost identities and behaviours. The readings I make in the next section aim to recover a meaningful past. Speculating on history, the gaps in knowledge are reconfigured through critique and proposal rather than documentary.

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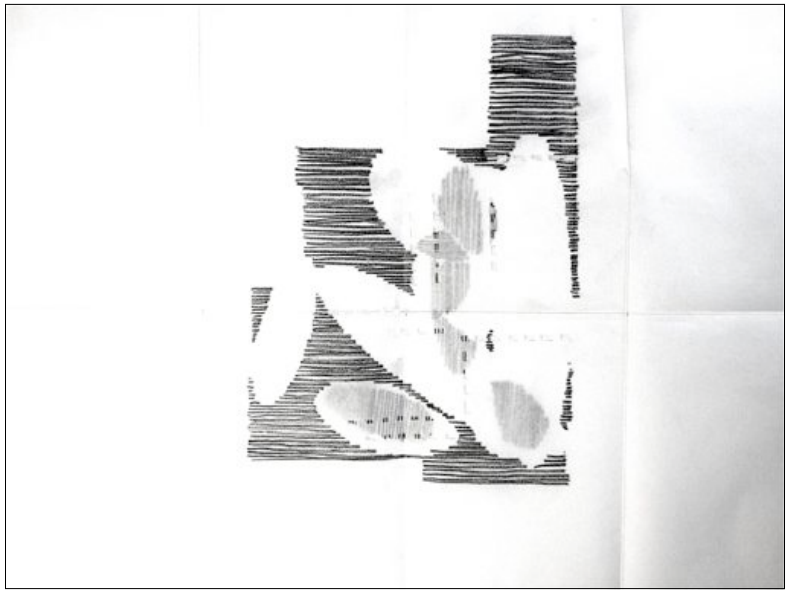
[99] Steedman, *Dust* (2001), 7. Steedman goes on to say that the archive, of course, contains all sorts of stuff: heterogeneous, undifferentiated stuff … texts, documents, data […]. This stuff, reordered, remade, then emerges – some would say like a memory – when someone needs to find it, or just simply needs it, for new and current purposes.' *Dust* (2001), 68.

[100] When I began this project the *Maison de Verre* was standing still, unoccupied for some years except for short stays by family members. See Adam Gopnik, 'The Ghost of the Glass', in *The New Yorker,* 12 (May 9, 1994), 54–71; Vellay, *La Maison de Verre* (2007).

[101] Many of the new connections made or details exposed in this thesis come from either raking over texts outside the canon of work on the building, contemporaneous with the building, and theoretical social histories. They are fragments gleaned from other sources, marginal to or outside architectural historiography.

Plate 88: Studies 2 6 for *Figure Ground: redrawing the plan of the* Maison de Verre *as dust*, 2012.



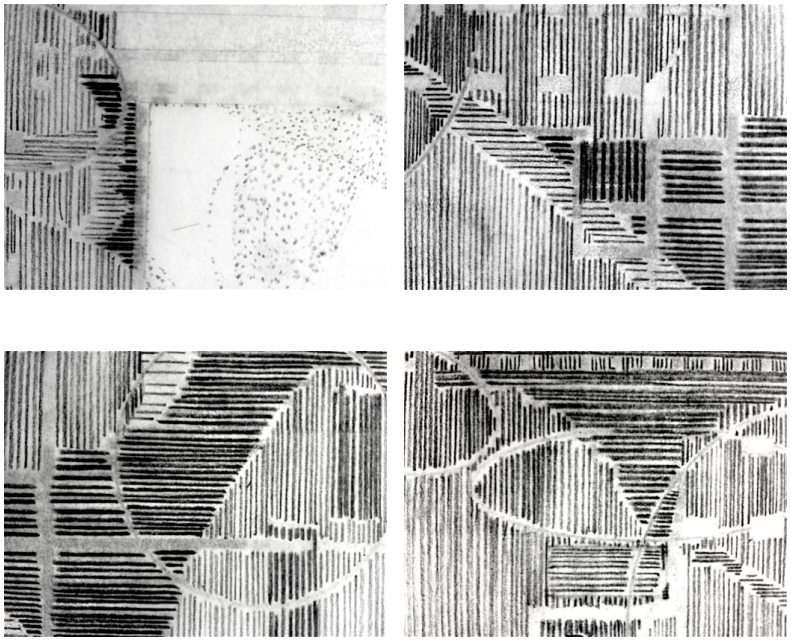
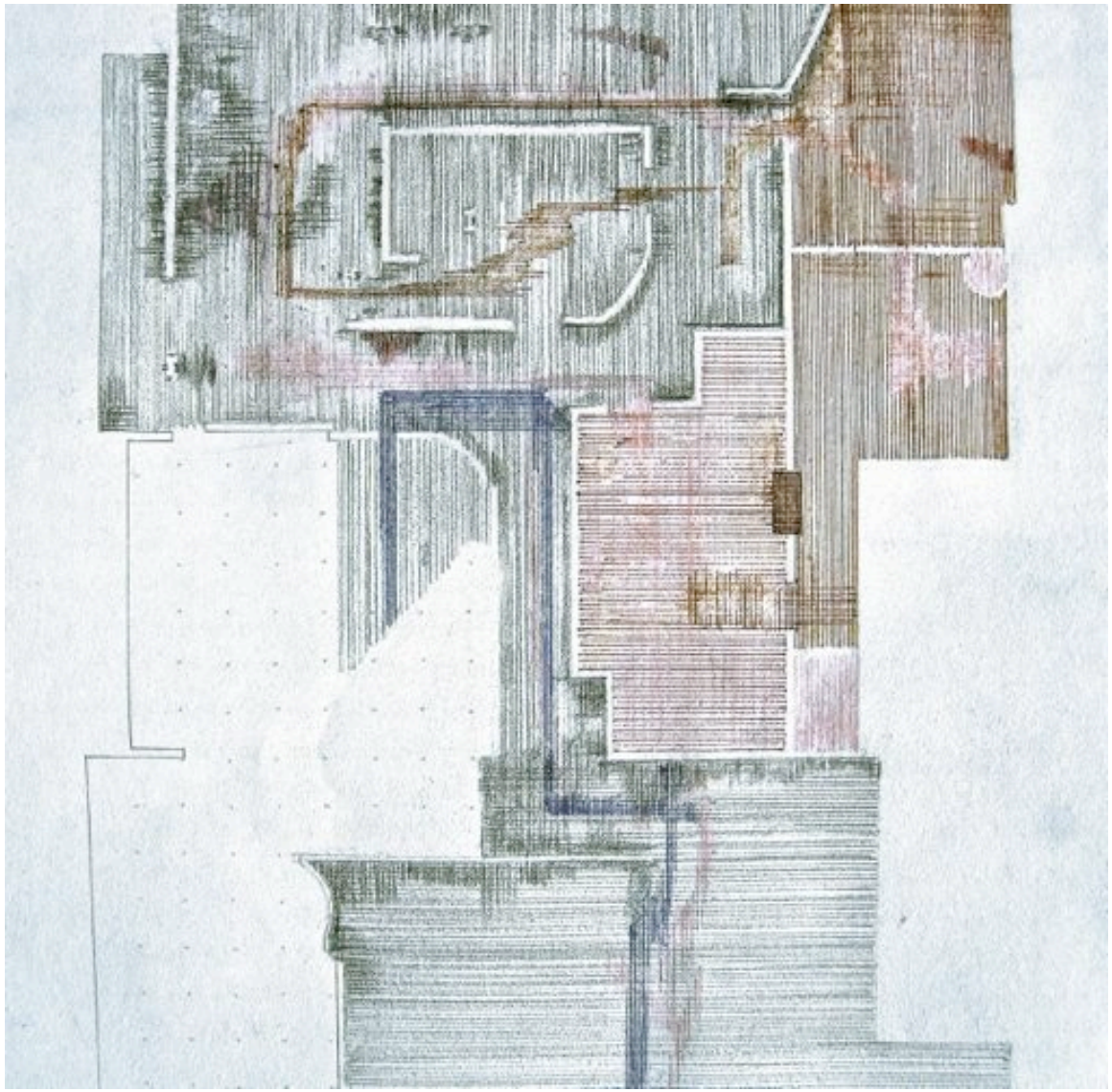


Plate 89: Study 7 for *Figure Ground: redrawing the plan of the* Maison de Verre *as dust*, 2012.



In Jacques Lacan's L Schema, the *objet petit a* is like a remnant dropped away during the subject's formation. Its continuing appearance is as an 'object of anxiety'.[102] Like dust, it remains connected to the subject, a reminder. Even as dust in the home is moved about from one surface to another, it sticks to moisture, infiltrates and embeds. It and its host are interchangeable. Bacteria is adhered to brick dust, flecks of dried saliva mix with ash and plaster, dust mites are touching your skin. Finally, my living body touches your dead dust.

In France, the bourgeois domestic interior had long been envisaged as an extension of the female body. Between the wars, conservative values prevailed upon women to return to the nineteenth century image of 'angel of the household'.[103] This mode of thinking about the female body as continuous with home, confining though it is in the context it was intended, persists in a slightly different way in the *Maison de Verre*. The house was female. Despite being the home and clinic of Dr Dalsace, and receiving many guests, both male and female, it was, as I will show following, the domain of Mme Dalsace. Further, a disproportionate number of other women must have visited, seeking treatment in the clinic for sexual disorder, inability to conceive and unwanted pregnancy.

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[102] On Lacan see the discussion above in 'Part-object, Part-architecture' and figure 3.5. The term 'object of anxiety', as an object of absence, comes from Jacques Lacan, *The Seminar of Jacques Lacan: Book II: The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954–1955* (W. W. Norton & Company, 1991), 164. See also Dylan Evans, *An Introductory Dictionary of Lacanian Psychoanalysis* (New York: Brunner-Routledge, 1996), 125.

[103] See Anne-Marie Sohn, 'Between the Wars in France and England', in Françoise Thébaud (ed.), *A History of Women in the West V. Toward a Cultural Identity in the Twentieth Century* (London: Belknap, 1994), 95.

The building, then, is a housing of the female body. Indeed, body and building begin to have blurred distinctions. The fabrics and layers, reflections, curtains, openings and continuous spaces of the building work as extensions to the body surface, ear and eye. The architecture – a folded, pocketed and sensual space – is felt, heard, touched, and seen in a way that makes one aware of one's own position and that of others through, against and in the spaces. I am uncertain whether I see you or some other colour through the perforations of metal; her or myself as a reflection in the glass [Plate 90]. This merging of boundaries between my body, image, building and between parts of the building, recalls philosopher Luce Irigaray's understanding of the female body as a multi-layered contiguous surface.[104] 'All figures blur,' writes Irigaray. 'The discontinuity of a cycle in which closure is a slit which merges their lips with their edge(s).'[105] Here, the body and building parts merge, the exterior of one the interior of the other.

This idea of the female body and building as interchangeable is played out in the miniature through dust as an un-homely mixture of materials, body and place. The building, rather than a motif of her domestic confinement, is traced with the female body's discarded cells creating invisible circulations as she moves through. The dust is therefore a specific history of the female bodies who occupied and visited. Corporeal materials infiltrating the home, they appear like ghosts, there and not there, of the past and in the present.

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[104] See Luce Irigaray, **'**The Looking Glass, from the Other Side**'**, (trans.) Catherine Porter, in *This Sex which is Not One* (Ithaca, NY: Cornell University Press, 1985); Luce Irigaray, **'**Volume Without Contours**'**, (trans.) David Macey, in *The Irigaray Reader* (Oxford: Blackwell, 1991), 53–67; Luce Irigaray, *Speculum of the Other Woman,* (trans.) Gillian C. Gill (Ithaca, NY: Cornell University Press, 1985).

[105] Irigaray, **'**Volume Without Contours**'** (1991), 56.

Four women

The interior of the *Maison de Verre*, although a complex interwoven space of homogeneous and layered materials, can be read as three distinct zones: house, servant wing and clinic. Although the occupants of the building could move easily from one space to another, each zone was the domain of a distinct female figure. The house is the space of its mistress, Annie Dalsace; the servant wing of her housekeeper; and the clinic a visiting patient.

In the remainder of the chapter I explore the history of each woman, I analyse and imagine each as a protagonist in the house, and the house through their presence. As it is through me that their experiences are instigated, I also place myself as a further protagonist. The result is four paired sections titled, 'Annie Dalsace / Dark Rooms', 'Housekeeper / Dusting', 'Writing Dust / Motes', 'Mary Reynolds / Dust Jackets'. The results re-form the *Maison de Verre* between the future and past, and between familiar and unfamiliar.

Plate 90: Blurred body building boundaries, 2009.

> 'The mistress of the house will look at your eyes and she will see all your crimes in them.'[106]

The Dalsaces position in society appears to have derived from inherited wealth and bourgeois standards. They utilised this to reframe a modern lifestyle. They lived comfortably yet promoted freedom, cultural opportunity and political change. The *Maison de Verre* – as both a modern house and progressive gynaecology clinic hidden away in an eighteenth century block – elucidated the tension of their position. In the period from its completion until the advent of the Second World War, it seems to have operated as a quietly radical space combining literature, philosophy, and politics with medical research.[107] Within its glass walls, it displayed both a softness and a starkness: embodying the contradictions between the exterior anti-feminist socio-sexual politics and the promotion of a modern sexual female.

Early reception of the *Maison de Verre* portrays it as the house of Jean Dalsace.[108] The 1927 and 1928 plans bear his signature of approval [Plate 86, 87]. When Annie Dalsace is mentioned in literature it is an image rather than active client. For example, Frampton states, 'there are times when the entire work

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[106] André Breton and Phillippe Soupault, *The Magnetic Fields* [1920], (trans.) David Gascoyne (London: Atlas Press, 1985), 65.

[107] As discussed in 'Background' and 'Glass', Dalsace was radical in his support and distribution of contraception, but did not publicly support abortion until 1969.

[108] 'House for a Doctor in Paris, with Glass Walls', in *The Architect and Building News* (Apr. 13, 1934), 40–43; Pierre Vago, Paul Nelson and Julien Lepage, 'Maison de Verre', in *L'Architecture d'aujourd'hui,* 9 (1933), 4–15. See also Vellay and Frampton (eds.), *Pierre Chareau* (1985); Taylor, *Pierre Chareau* (1992).

seems to be an exact reflection of the personality of Annie Dalsace, a subtle homage'.[109]

I argue that it was Annie Dalsace who instigated the design of the house, and controlled it once it was built. She regularly required Chareau to have full size prototypes made of interior details during the construction period.[110] Rather than reading this as an implication that she could not otherwise understand the proposals, I believe Annie's involvement indicates she was trying to achieve particular outcomes. Once the building work started on site, the interior and exterior radically departed from the 1928 plans. Rather than passively receiving the drawn design of the building, I propose that Annie effected the changes, particularly to the domestic areas. Writing in 2008, Dominique Vellay recognises Annie Dalsace's involvement in the house: 'Suddenly I understand something about my grandmother's insolence: she is the one behind the building of this mysterious house. Who ever said my grandmother was shy? Her glass house is nothing if not bold.' She continues: 'She was among the first to be excited by modernism, while my grandfather's passions lay elsewhere.'[111]

In 1905, when Annie Dalsace [1896–1968] was nine she began to take English and dance lessons from Englishwoman Dollie Chareau [1880–1967] who had married Pierre Chareau in 1904.[112] In 1918, Annie married Jean Dalsace, and the two couples became friends, despite the age difference. Having commis-

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[109] Frampton, 'Pierre Chareau' (1985), 245.

[110] Taylor, *Pierre Chareau* (1992), 34.

[111] Vellay, *La Maison de Verre* (2007), 8; 9. Jean Dalsace was the son of a high ranking civil servant, and twenty-eight when the Dalsaces first worked with Chareau. By the time the *Maison de Verre* was complete he was an established gynaecologist. Vellay and Frampton (eds.), *Pierre Chareau:*(1985), 34.

[112] Vellay and Frampton (eds.), *Pierre Chareau* (1985), 34.

sioned Chareau to design furniture and layouts for their tiny apartment at 195 Boulevard Saint-Germain, they began talking about the *Maison de Verre* in 1927.[113]

The two decades after the First World War saw many changes to the status of women, yet current commentators, Alex Hughes for example, argue that full or even substantial female independence was unattained. Various factors contributed: women labour workers became redundant when the men returned from war; the women's right to vote was not sanctioned; 1920s legislature against contraception and abortion was accompanied by a reconfirmation that the female role was as a mother.[114] Despite the politically anti-feminist atmosphere, it is demonstrable that the war had challenged the framework of hierarchies between the sexes, and women's thinking about sexuality. The modern Parisian female, *femme moderne*, could no longer be reduced to the simple dichotomy of prostitute or domestic mother.[115] As Michèle Plott writes, by the 1920s '[Bourgeois] Parisian women still had to follow society's rules, conforming outwardly and observing proprieties. But they had more freedom to act on their sexual desires than most middle class women of the nineteenth century.'[116] Anne-Marie Sohn argues that

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[113] Vellay and Frampton (eds.), *Pierre Chareau* (1985), 34.

[114] Alex Hughes, '1900–1969 Writing the Void', in Sonya Stephens, *A History of Women's Writing in France* (Cambridge: University of Cambridge Press, 2000), 148–9.

[115] The idea of the *femme moderne* represented the debate on the roles of women in the early twentieth century. See Mary Louise Roberts, *This Civilization No Longer Has Sexes: Reconstructing Gender in Postwar France, 1917–27* (London: University of Chicago Press, 1994), 1–16. See also Andrea Weiss, *Paris Was a Woman: Portraits from the Left Bank* (London: Pandora, 1995).

[116] Michèle Plott, 'The Rules of the Game: Respectability, Sexuality and the *Femme Mondaine* in Late-Nineteenth-Century Paris' in *French Historical Studies*, 25/3 (Summer 2002), 556. See also Anne-Marie Sohn, *Du premier baiser à l'alcôve: La sexualité des française au quotidien (1850–1950)* (Paris: Aubier, 1996), 225.

this was due to the increased availability of contraception and abortion.[117] Although childbearing was still promoted as the ideal, women were potentially able to spend less time on the household and concentrate on entertaining and social pleasure.[118] The accessibility of public life, and the control over fertility allowed some bourgeois women to reevaluate their positions. They embarked on craft or creative pursuits, became collectors or established public personas.

It is difficult to know whether Annie Dalsace thought of herself as a *femme moderne.* Versed in design and art, it was she who had inherited the resources to finance the building of the *Maison de Verre*, as we have seen. Alice Friedman writing on specific women and their modern homes identifies that: 'modern architecture was used to alter the conventions of domestic life'.[119] Her examples of change pertinent to Annie Dalsace's house are: 'an expanded definition of home to include various types of work and leisure activities […] shifting the balance between public and private space', 'unconventional spaces and/or non-traditional arrangements of rooms', 'foregrounding history or memory with particular attention to women's roles as […] collectors' and the 'home as a representation of the activities and values of its occupants.'[120] By asserting Annie's role in the design of the *Maison de Verre*, rather than suggesting the house has a femi-

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[117] She says: 'This reinforces a very old but reconstituted Malthusianism after 1900 caused by the explosion of abortion. The decline in unwanted pregnancies is probably the decisive factor that allowed women to accept an extramarital sexual relationship.' Sohn, *Du premier baiser à l'alcôve* (1996), 308–9. My translation.

[118] Plott, 'The Rules of the Game' (2002), 537–539. Sohn, 'Between the Wars in France and England' (1994), 105.

[119] Alice T. Friedman, *Women and the Making of the Modern House: A Social and Architectural History* (New Haven: Yale University Press, 2007), 17.

[120] Friedman, *Women and the Making of the Modern House* (2007), 17.

nine aesthetic, I establish a female *account* to accompany the already male historical interpretations of the spaces.

As we saw in the chapter, 'Glass', Annie visually monitors the house from two strategic points – the top of main stair and the winter garden. With her image as a sculptural head in Dr Dalsace's consultation room, and portrait at the base of the stair, she makes appearances both within the clinic and on leaving the salon. The house can also be analysed through her other movements [Plates 91]. By drawing her possible circulations through the house as ellipses, filled with colour when primary views and left empty when movement, the plan is respatialised. These are edged by ambiguous translucent walls and screens which form backdrop, viewing frame or envelope. Overlapping all three floors reveals a different kind of plan to the house, of female occupation. Full of stolen glances, the whole house is potentially a boudoir [Plate 92].

Annie Dalsace, though, does not have access to the two rooms described above as dark rooms – the rooms of the clinic which replaced the archives and dark room on the 1928 plan. There is a further completely internal dark room, an insulated telephone booth on the first floor within Dr Dalsace's study. These three rooms are the spaces through which Dr Dalsace's patients are restored to a pure and virginal status. To Annie Dalsace, and to us today, they remain mysterious smear and dust filled spaces, with uncertain objects and procedures. The project following, 'Dark Rooms', deals with this uncertainty.

Plate 91: Madame's spheres of influence, 2012.

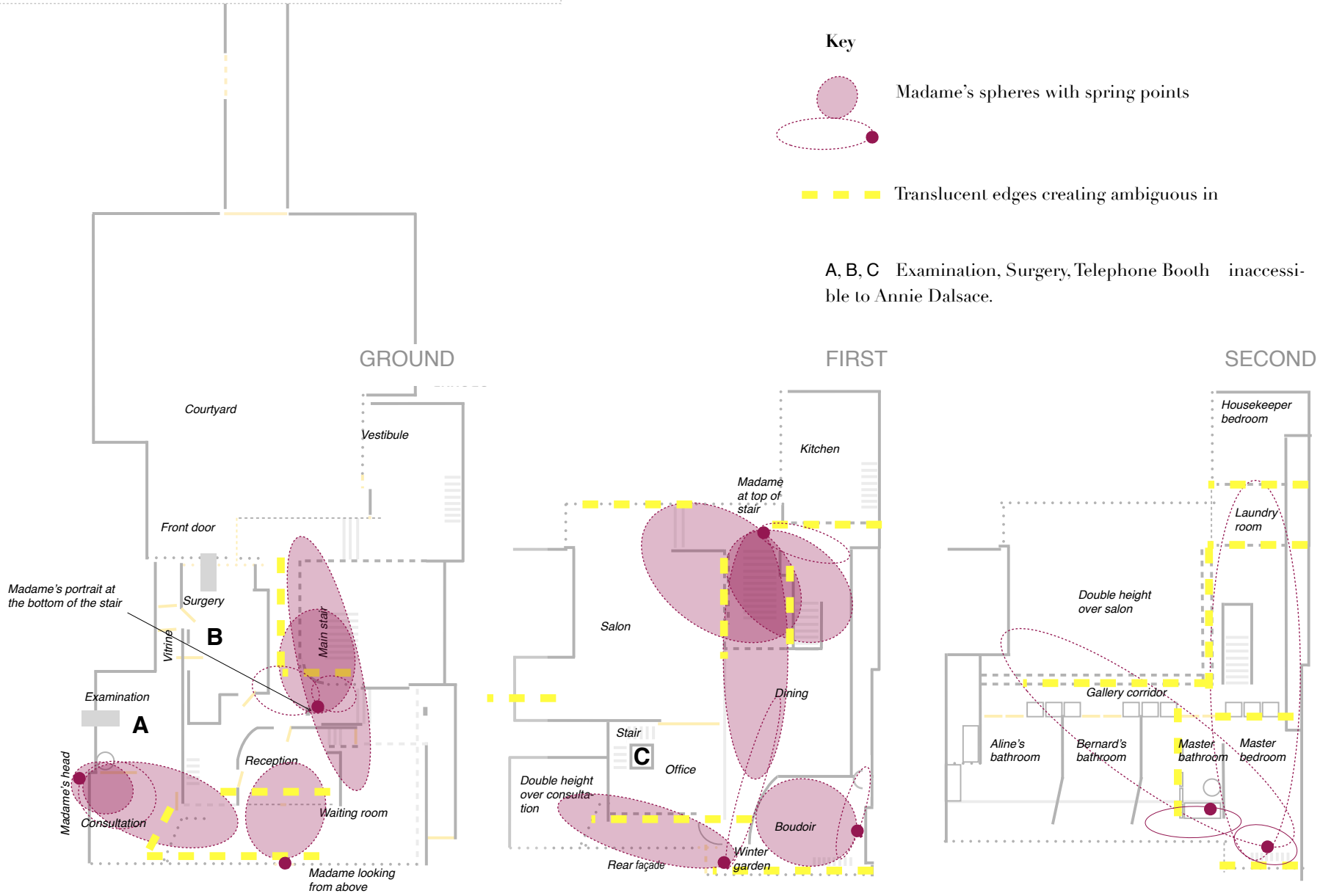
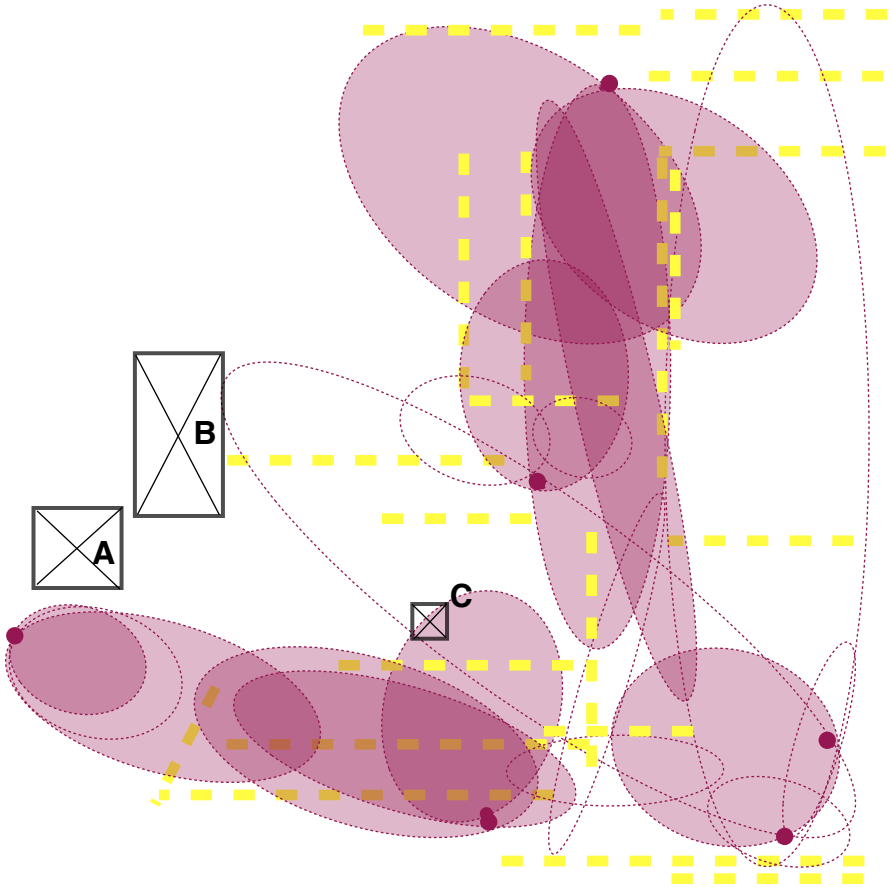


Plate 92: The whole house as boudoir, 2012.



Key

A Examination
B Surgery
C Telephone booth

Dark Rooms

Dark Rooms

Vitrines reconstructing the *Maison de Verre*

'One day or another, it is true, dust, supposing it persists, will probably begin to gain the upper hand over domestics, invading the immense ruins of abandoned buildings, deserted dockyards; and, at that distant epoch, nothing will remain to ward off night-terrors, for lack of which we have become such great book-keepers …'*

Carolyn Steedman writes that it is impossible for dust, as opposed to waste, to ever really disappear: 'Now, having breathed in the dust, *knowing about it*, in a way that was not really possible in a period of attention to its opposite, Waste, the implications of this imperishability this *not-going-away-ness* of Dust for narrative, force themselves forward.' She proposes a 'Philosophy of Dust [which] speaks of a grand circularity', where the narrative element of history can reposition the discordant nature of event as well as the tendency to linearity, drawing them into a circle with no particular ending.†

Walter Benjamin suggests that the container, or *bôite*, signifies 'the originary form of all habitation.'‡ As such, it is a place for collection. As Benjamin explains though, collecting is an impulse to return, always frustrated because 'as far as the collector is concerned, his collection is never complete; for let him discover just a single piece missing, and everything he's collected remains a patchwork.'§

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* Georges Bataille (ed.), 'Critical Dictionary and Related Texts' [1929–30], (trans.) Iain White, in *Encyclopædia Acephalica* (London: Atlas Press, 1995), 43.

† Steedman, *Dust* (2001), 165–7.

‡ Benjamin, *The Arcades Project*, (2002), 220.

§ Benjamin, *The Arcades Project*, (2002), 211.

The project, 'Dark Rooms', responds to the idea that the potential archival rooms at the *Maison de Verre* and the documents, papers and objects they would have collected are missing, replaced by a set of 'dark rooms' for practising gynaecology.

Dark Rooms consists of four boxes to collect clues found now in the building.

The boxes reference Joseph Cornell's series of sandboxes, three of which were owned by Mary Reynolds.** One of these, described by Reynolds as having black powder and a ring, bears resemblance to *Surrealist Box (Sand Painting)* c, 1951 [figure 5.21], This box is shallow and wooden (26 x 18.4 x 4.76 cm), with a glazed plane to its top for observing the contents. It contains black sand, a metal ring and ball bearings. The back inner surface is inscribed with lines radiating from a centre point. This surface is reddish-purple possibly from pigment left by the sand. The whole ensemble suggests interaction, needed to move the contents about, and restlessness in the drifting contents. The body of the viewer begins to occupy the box. Like Cornell's boxes, the 'Dark Rooms' are proposed as 'triggers' to the viewer.††

In 2010, I made four identical boxes from 9 mm MDF. Each measures 297 x 420 x 210mm, the size of A3 and A4 archival folders made three-dimensional. Each has a glass side for looking through or at. Operating on several scales simultaneously, they refer to the *Maison de Verre* appearing as a large vitrine (as argued in 'Glass'), and to its vitrine of medical equipment in the gynaecological suite in the building. They suggest that one may not just look into them, but slide open the glass pane and touch the contents, interact with them, understand them through

** Janine Mileaf, 'Boxes, Books and the Boîtes-en Valise', in Sophie Lévy (ed.), *A Transatlantic Avant-Garde: American Artists in Paris 1918–1939* (Berkeley: University of California Press, 2003), 171. Citing letter from MJR to JC May 1, 1946.

†† This term is borrowed from Janine A. Mileaf, *Please Touch: Dada and Surrealist Objects after the Readymade* (Lebanon: Dartmouth College Press, 2010), 172.

Figure 5.21: Joseph Cornell, *Untitled (Sand Box)* c, 1950.

Figure 5.22: Emma Cheatle, *Dark Rooms*, 2010.

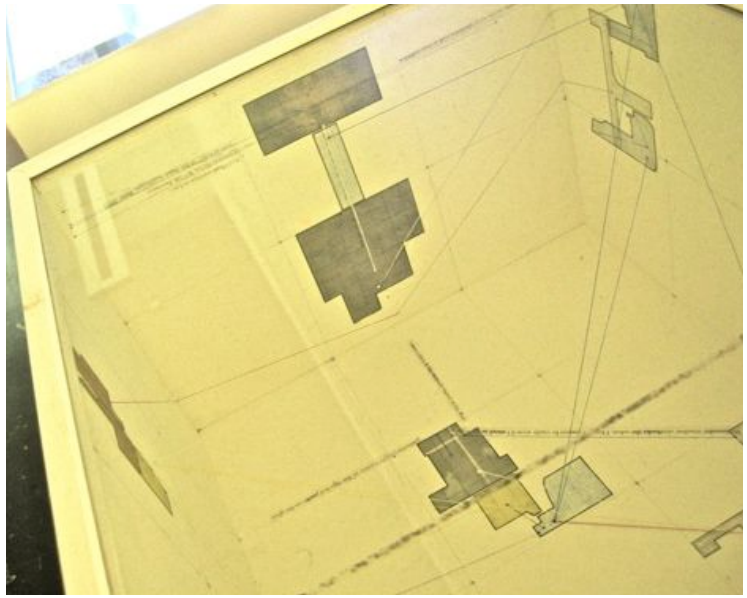
touch.[#] Lit internally they sit horizontally to be viewed or felt from above at one scale display cases, at another, small rooms.

The vitrines contain the dust shifting around the *Maison de Verre*, with other collected or proposed objects, in odd arrangements. The interior walls, like Cornell's are inscribed with drawings, figure grounds. The complete vitrines depict partial perceptions and memories of the history of domestic and medical occupation of the *Maison de Verre*. When first displayed, one box was accompanied by audio narratives, my voice reading fragments of histories and fictions, in, or about, the *Maison de Verre* in 1934, spoken, whispered or clicked out like morse code. The audio work, aimed to work at a cross-section to the material of the boxes themselves, is now rehoused in empty books as seen in the next chapter, 'Air'.

First displayed as part of an exhibition at the Bartlett School of Architecture UCL, this project's intended location is the examination room at the *Maison de Verre*.

[#] Benjamin and Irigaray both suggest that looking and understanding is related to touch. See Esther Leslie, 'Telescoping the Microscopic Object: Benjamin the Collector', in Alex Coles (ed.), *de-, dis-, ex-, 3: The Optic of Walter Benjamin* (Black Dog Publishing, 1999), 67; Kelly Oliver, 'Vision, Recognition, and a Passion for the Elements', in Cimitile and Miller (eds), *Returning to Irigaray* (2007),121–135.

Plate 93: *Dark Rooms*, vitrines, 2010.



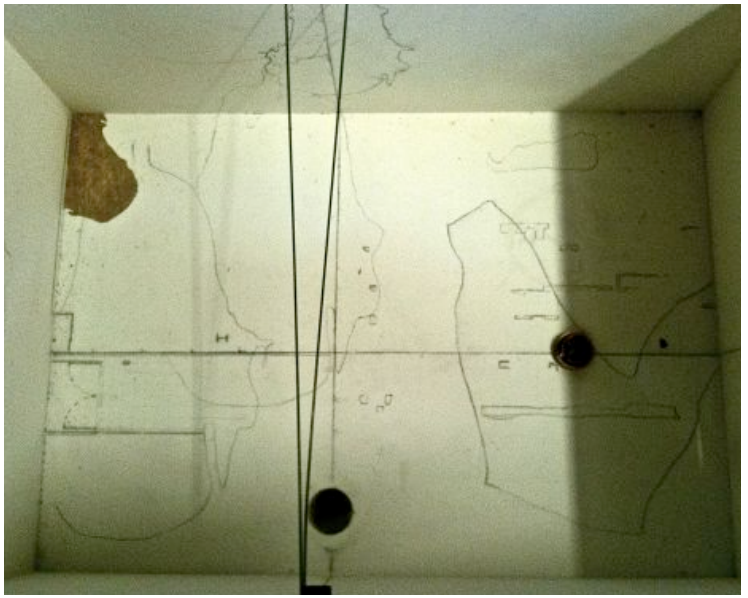


Plate 94: *Dark Rooms*, vitrines, 2010.

Dark Room 1: A scattered plan weighted back together.

9mm mdf box painted with 5 coats of white emulsion, 6mm float glass, dust from the exterior glass lens facade at the *Maison de Verre* in clear varnish, paper (layout, waxed, film), gouache paint, pencil (coloured leads and graphite), text on magic tape, threads, weights.

The plan, used to decode and clarify, is usually a complete overview of a building. Here, it is analysed and redrawn as delicate colour coded squares, delineated different uses or inhabitations of parts of the *Maison de Verre*. These coloured squares are collated into related areas, and then separated outward onto the five inner faces of the box. The separations disable the plans from being read as complete or whole and re-spatialise them into miniature narratives. Parts of the plan are then reconnected across their separations by coloured threads which hang from weighted lead beads beneath the box. Drifts of text on the surface of the box incorporate a poetic narrative into the plan.

Dark Room 2: View from the courtyard.

9mm mdf box painted with 5 coats of white emulsion, 6mm clear float glass, dust from the examination room at the Maison de Verre in clear varnish, card, paper (cartridge), black egg-tempera paint, pencil (white, red and graphite), cat-eye LED light.

The box contains a collection of left over containers or negatives of other pieces. All are impenetrable, and exhibit something of the inverse of the other pieces. These refer to the spaces in between spaces.

Dark Room 3: The contents of the surgery remain hidden.

9mm mdf box painted with 5 coats of white emulsion, 6mm float glass, 1920s gynaecological instruments, paper, ink, varnish, light fitting.

Dark Room 4: The things the house does not want to hear.

9mm mdf box painted with 5 coats of white emulsion, 6mm float glass, dust from the salon at the *Maison de Verre* in clear varnish, blood and pigment, light fitting, pencil (coloured lead and graphite) steel wire, card, gouache paint and varnish, iPod.

This box contains all the left over dust collected from my visit to the *Maison de Verre* on 23 November 2010. A sound recording made while sweeping the *Maison de Verre* cutting and sweeping, scraping and smoothing is hidden in the box.

Housekeeper / Dusting

As we have seen, there were no live-in servant spaces in the 1928 plans of the *Maison de Verre*. Perhaps it was the intention for Madame to become a 'housewife', or to have 'daily' servants. *Provisions* and *cuisine* were on the ground and first floor prospectively in a small projecting wing like the current one, with its own entrance and a narrow 'back' stair connecting internally, but the same wing housed two children's bedrooms on the second floor. The *lingerie* was in the diagonally opposite corner of the house. The servant role was therefore not a defined presence in the house. At some stage, the other spaces coalesced more definitely, clinic forming on the ground floor to replace the archives. At the same time, the projecting servant zone was properly instated. The result is a defined unit approximately 6 x 4.5m on three floors, which accommodated a work space on the ground floor connected by a stair to a kitchen on the first, and the laundry and live-in bedroom for a housekeeper on the second floor.

From the courtyard the wing is an obvious projecting form to the left of the front of the building, often cropped out of photographs and rarely discussed [figure 5.23]. It creates an obvious separation of the housekeeper from the main house. The housekeeper enters the house though – as the other occupants – through the one shared entrance door. Once inside her wing is hidden from the interior by a darkly clad internal wall and reflective doors and screens [figure 5.23]. As a key figure organising and cleaning the house, she keeps herself and the dust, a sign of sexuality and decay, out of sight.

Despite her invisibility she takes on an articulate role in the layout of the home. The long north edge of the house is a spine to her activities, enclosing preparation and storage spaces [Plate 95]. At one stage service was to be partly mechanised, with a sliding trolley attached to the ceiling to assist her delivering food to the dining room from the kitchen [figure 5.24]. Although the ceiling mecha-

Figure 5.23: Pierre Chareau, (**top**) Exterior of servant wing. Photograph Emma Cheatle, 2009. (**bottom**) Wall containing salon from servant wing. From Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 117.

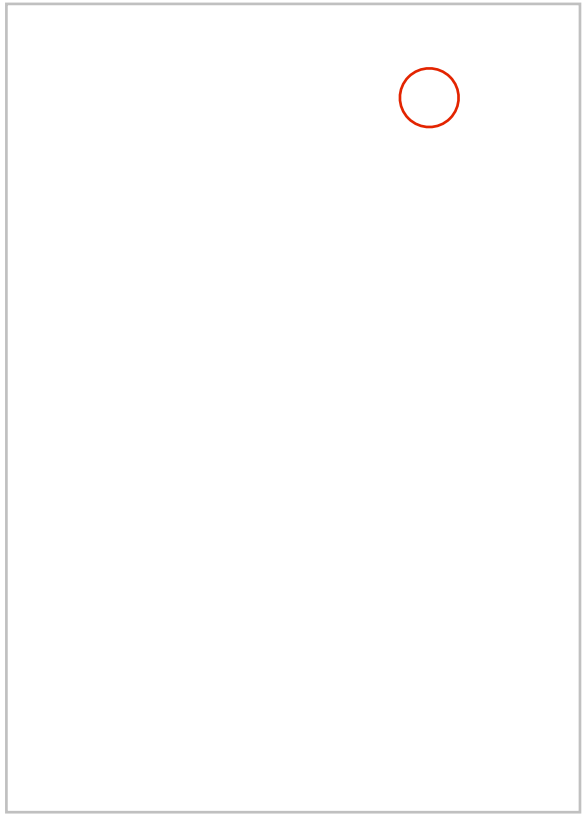


Figure 5.24: Pierre Chareau, Perspective of servant spine and trolley [circled], 1929. Trolley mechanism, later dismantled. From Kenneth Frampton, 'Maison de Verre', in *Perspecta,* 12 (1969), 116.

nism was installed, the trolley, recalling the Bride's hanging down mechanism, was never made and the whole thing later dismantled.[121]

On the upper floors the spines connect the housekeeper directly to her mistress Annie: on the first to the boudoir through the hidden *passe plat* discussed in the previous chapter; and on the second through to the Master bedroom. On the ground floor she accesses the front door and the waiting room. Through these connections she invisibly stitches the key parts of the home together.

Even more pertinently, on each floor she is given strategic points for overseeing the interior and exterior of the home. At ground level she can monitor a guest as he/she comes through the courtyard and as he/she enters the house [Plate 95: 1, 2]. On the first floor she can also see into the courtyard [Plate 95: 3]. On the second floor her large window looking down into the double height salon interior is matched by a smaller one overlooking the external courtyard [figure 5.25]. She splits her gaze along the front façade to monitor inside and out at the same time [Plate 95: 4, 5].

Bearing in mind the earlier descriptions of Annie's circulations, I suggest she and her housekeeper between them oversee the house, as figures moving behind the scenes [Plate 96]. They collect and control its circulations of dirt and dust through their spatial occupation and a sweeping eye. I surmise, though, that it was the housekeeper, not Annie, who would have regular access to the 'dark rooms' of the clinic and telephone booth, as the prime cleaner and manager behind the scenes.

[121] Frampton, 'Maison de Verre' (1969), 116, 117.

The housekeeper's identity is unknown. As is the dust. The project following this section, 'Dusting', is presented as a manual for cleaning the house, her house. It gives methods for dusting and collecting and visualising the found dust and particles. Given her allusiveness, I take on her role, her identity. Quantifying the results becomes an attempt to read her occupation.

Figure 5.25: Pierre Chareau, housekeeper's split views, second floor. Photographs Emma Cheatle, September 2008.

Plate 95: Housekeeper's occupation and split views, 2012.

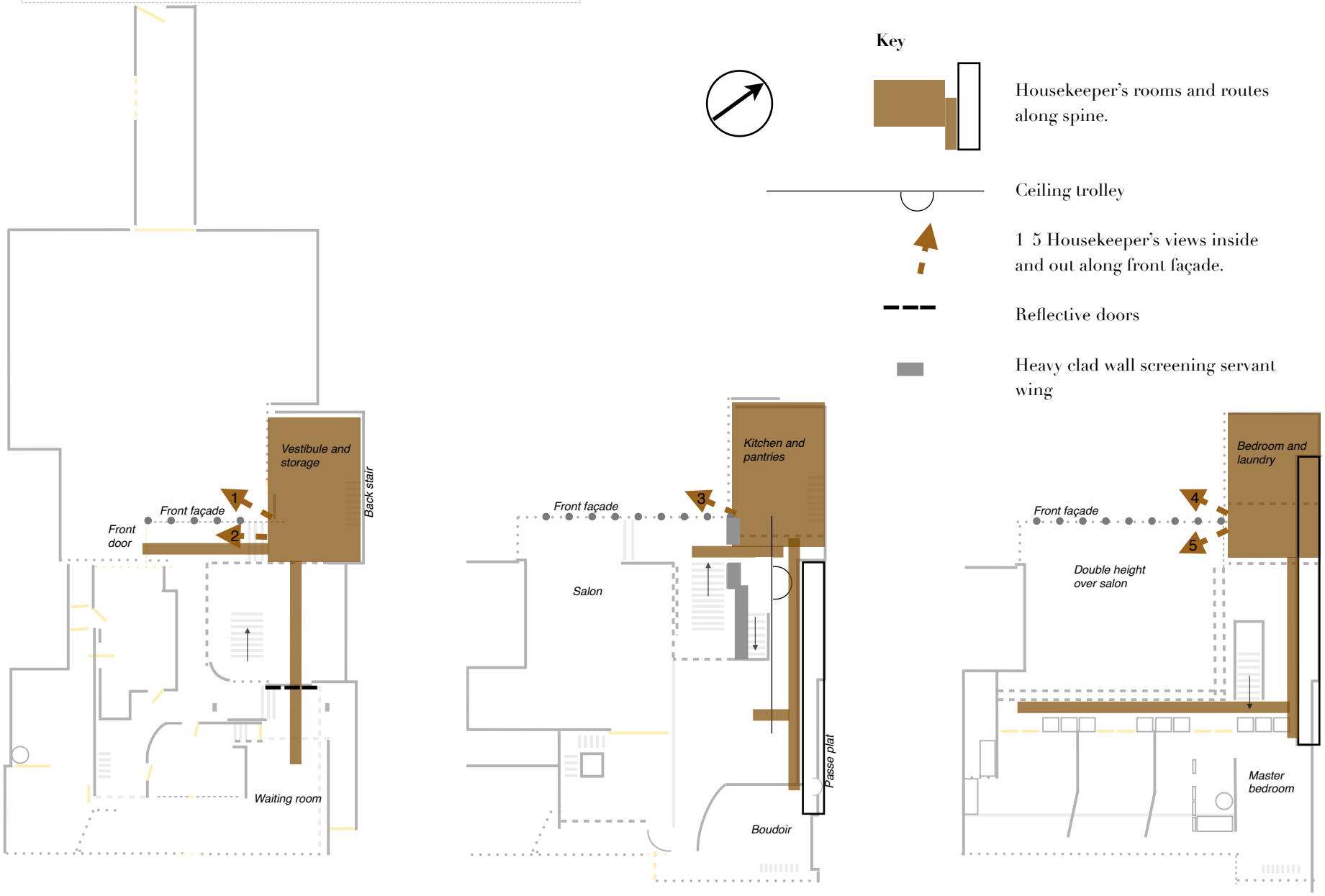
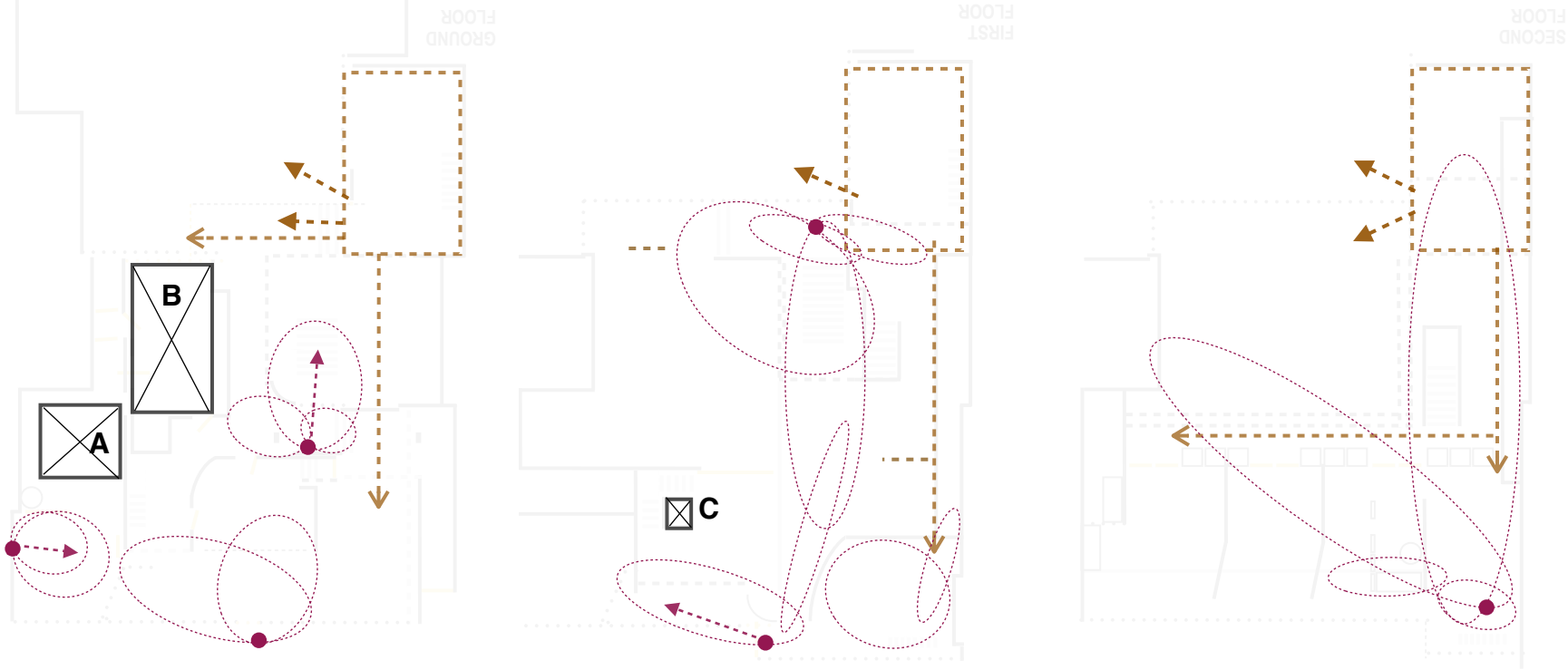


Plate 96: Annie and her housekeeper's house, 2012.

Key

A Examination
B Surgery
C Telephone booth



Dusting

A Manual for Sweeping the *Maison de Verre*[*]

[Walter Benjamin observed that from the 'ruins of the bourgeoisie', 'history decays into images, not into stories'.[†]]

Visit the *Maison de Verre* to dust.[‡] Take plans to mark up, tools, containers, labels. Lie on the floor and crawl under, against and inside the house's crevices and mechanisms sweeping with the brushes; sliding the finger along surfaces. Attempt to locate history in the 'matter out of place' of modernist architecture, the smell, sound, taste of it.[§] Enact the concerns of servant rather than served.[**]

Contents of Booklet:

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[*]Forensic sweep of scene.
Collect evidence in historic building as its own archival container.

[†] See Benjamin, *The Arcades Project* (2002), 476, 87 [C2a,8]; the 'ruins of the bourgeoisie' is a phrase coined by Balzac, *Le Diable á Paris* (Paris, 1845), vol. 2, 18.

[‡] These visits were made in November 2010 and September 2011.

[§] Materially, the dust refers to the past, the city, the trace of the bodies of Dalsace, Duchamp, Mary Reynolds and Benjamin and others. Architecture, a resistant layer between, sheds itself to combine with those [lost] bodies.

[**] On the first visit, the house was frustratingly clean. My message to the current housekeeper asking her not to clean before my visit had not been understood. Yet despite this I found dust. It was like a precious a commodity. Additionally the housekeeper gave me the very full contents of her vacuum cleaner, which form 'Dis-Sections' following [Plates 106–111].

LIST OF TOOLS

- Brushes
- Small dust pan and brush
- Pre-made folded paper dust catchers
- Linen cloths
- Lidded airtight containers
- Labels and pens

Plate 97: Plans.

Note: Numbers here cross refer to the Dust Sweeping Schedule following.

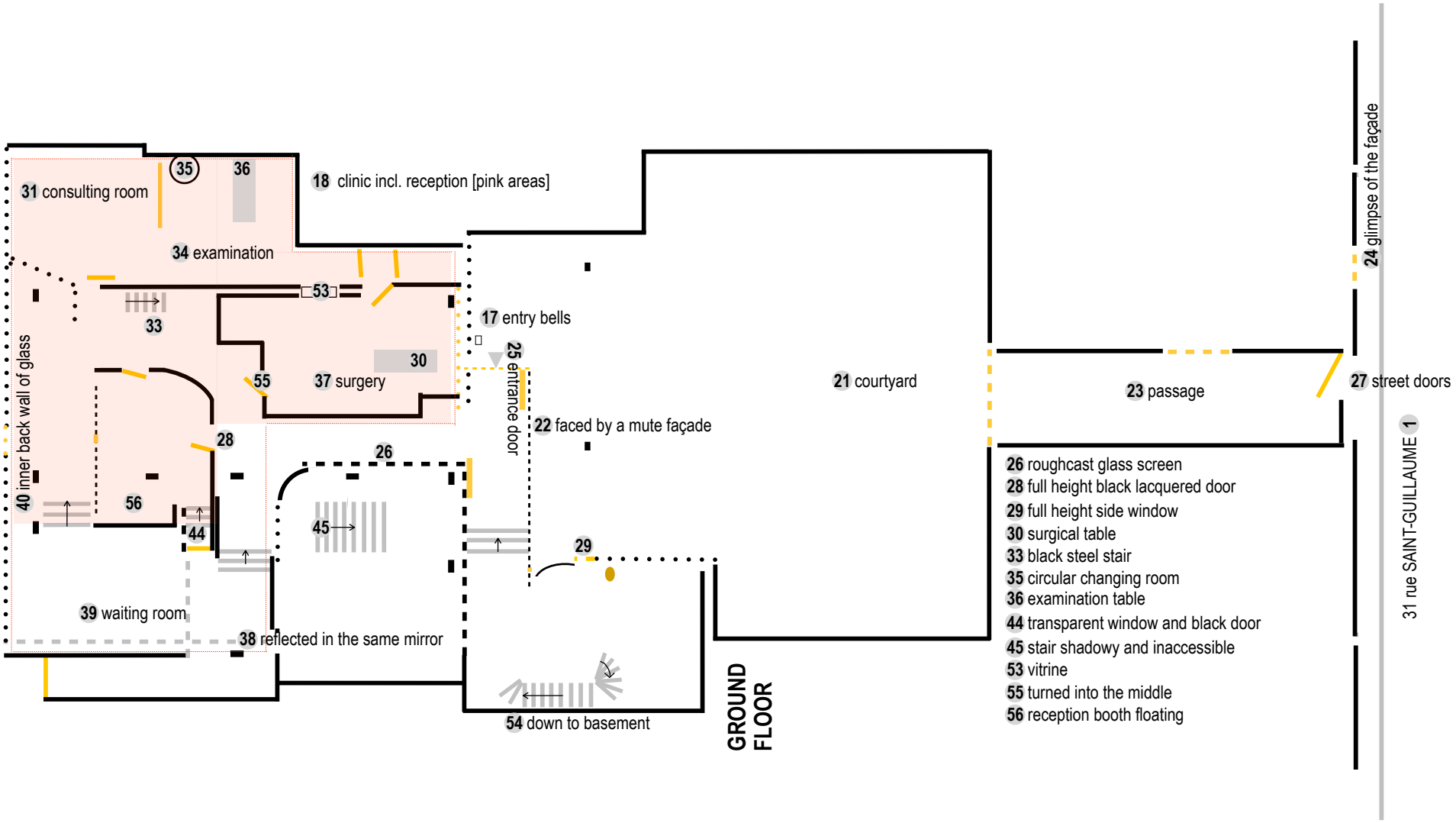
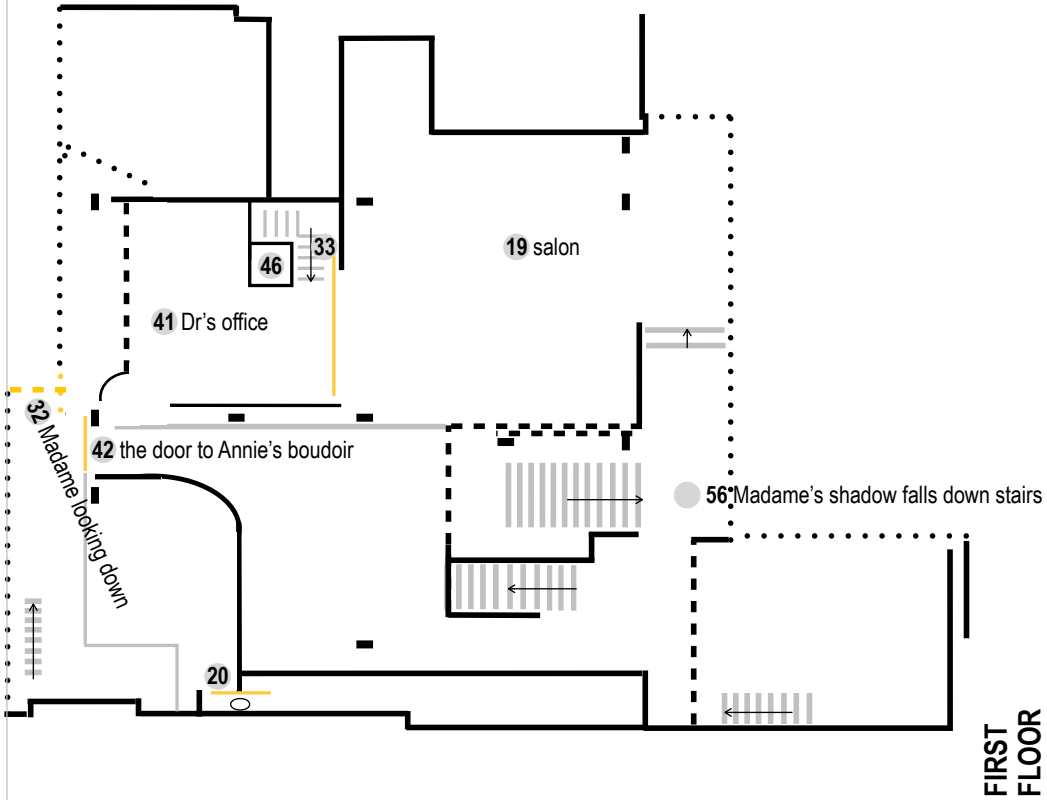
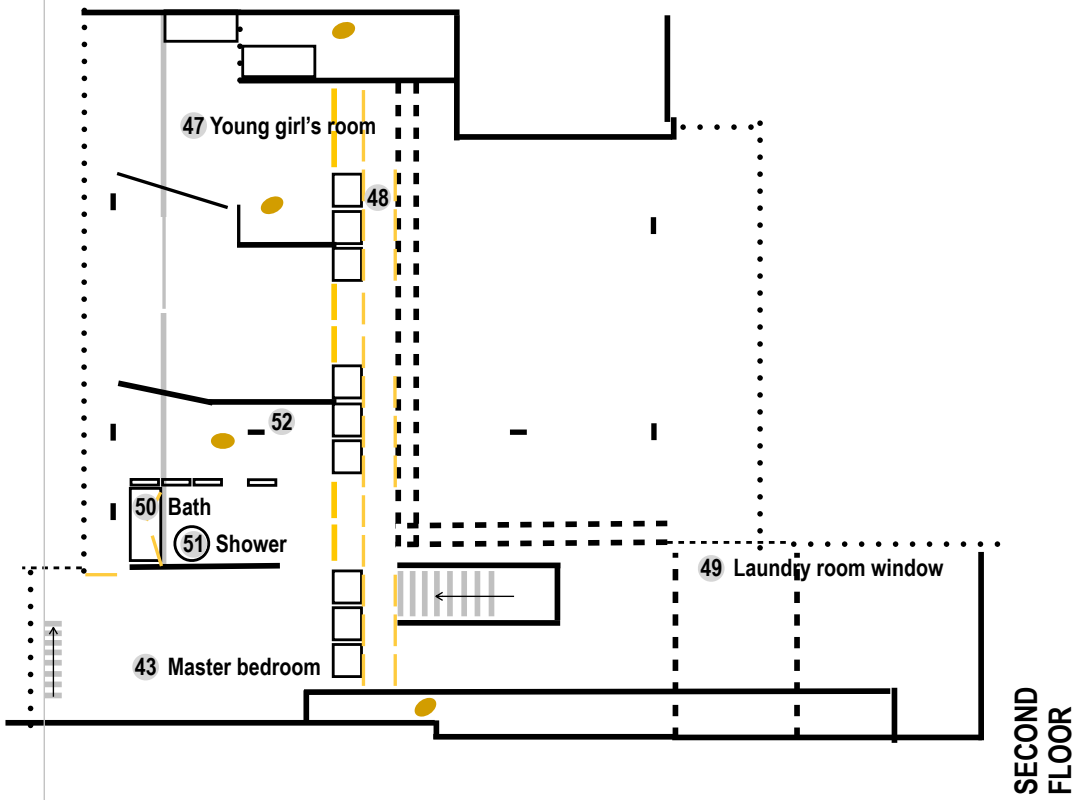


Plate 98: Plans.



20 little hatch in the corner
33 black steel stair
46 telephone booth

Plate 99: Plans.



48 Young girl's corridor
52 Hinged mirror

DUST SWEEPING SCHEDULE [numbers in brackets refer to plans]

Actions

Using the following actions clean the areas 1.01 1.22 on Dust Sweeping Schedule:

- *Sweep* area horizontally
- *Brush* area vertically
- *Collect* in paper catchers
- *Wipe* clean with linen cloths
- *Remove* dust into airtight containers
- *Annotate* on container and location map

Ground Floor Sweep

STREET **[1]** DOORS **[27]**

Start the sequence on the rue Saint-Guillaume, 75007, Paris.

Turn off the wide boulevard Saint-Germain; rue Saint-Guillaume is a narrow street lined with eighteenth century *hôtel particuliers*; no. 31 is a modest three-storey *hôtel* with attic; the façade is plain; central entrance with large forest green painted doors; carved stone keystone head to masonry arch over; windows shuttered (closed) to ground floor. (Later on you may glimpse the façade of the building inside through the right hand shuttered window.)

1.01 Sweep area (1000 x 300 mm) of limestone setts (set in diamond pattern) as threshold to green doors, until required material collected.

1.02 Sweep window cill to right hand window.

PASSAGE **[23]**

Enter through the right hand green door; passage dark and cool, approximately 10 m in length; floor surface asphalt with upstanding limestone perimeter.

1.03 Sweep limestone upstand pavers to perimeter at 1m intervals, until required material collected. Pay particular attention to threshold to courtyard.

EXTERIOR COURTYARD **[21]**

Enter square enclosed space approximately 13m x 13m, faced with façade to *Maison de Verre*, and enclosed on other three sides by the *hôtel* to street front and adjacent *hôtels* to sides. Floor set with large irregular granite setts measuring approximately 200mm x 250mm, with mortar joints. A single storey carport sits to the south flank.

1.04 Sweep area (300 x 300 mm) of granite setts in middle of courtyard, at a point measured equidistant from each façade enclosing the space, until required material collected.

FAÇADE **[22]**

The front façade of the new building is composed entirely of glass lenses on the upper two floors and clear glass at ground level all in black steel framed free façade; this façade also wraps approximately halfway around the north flank to the courtyard. The remaining, original third floor apartment can be seen above. Entrance to the building is not visible. On closer inspection the front façade is split at centre of ground floor level with glass lens inner layer to right and plate glass outer layer to left. To the right the courtyard ground becomes flooring of Pirelli white rubber studded tiles set 25mm above setts. Waist height black steel column with 3 no. bells in vertical row labelled from top 'DOCTEUR', 'VISITES', 'SERVICE' **[17]** set on this floor, outside the lensed layer of façade.

1.05 Sweep along junction between 18th century courtyard and steel framed free façade.

ENTRANCE **[25]**

To the left of the bells are two formerly unseen plate glass steel framed doors set perpendicular to steel frame of outer and inner layers of façade. Ring the bell. Swivel round 90° to left and enter through left hand glass door. Entrance corridor to servants' quarter runs along plate glass inner wall, before stepping down by 3 no. risers.

Instead step to the right into the body of building. On the right is a wired rough-cast glass opening air vent to inner layer of front facade, and further inside on the same side, a curved piece of plastered wall. Floor continues to be Pirelli rubber studded white tile.

1.06 Sweep entrance doors threshold and along lensed façade particularly around base of bell column.

1.07 Sweep around floor of vent and curved wall.

CORRIDOR **[26]**
Move along corridor into interior. To the left a full height wired rough-cast glass black steel framed screen runs along length of corridor, not quite meeting floor. White plastered wall runs to right along corridor. White Pirelli flooring continues throughout.
The first black lacquered full height valve shaped door is to the end of corridor **[28]**. This door is to the receptionist's booth which one will not enter.
Turn to left at end of corridor seeing skinny black steel stair to right **[33]** just before turning. The main stair rises back to the front of the building through black perforated steel curved screens to the left. Continue in, passing orange steel column on right towards second orange steel column beyond. Reach 3no. risers descending.
1.08 Sweep goings of each step down.

COLUMN **[38]**
Before descending, see your groin framed in the mirror fixed to the orange column ahead. As you descend your face will be framed in the same mirror.
1.09 Run cloth along mirror and edges to capture this dust.

WAITING SPACE **[39]**
Just before reaching this column, turn to the right to a space defined by the back wall of the house and the reception booth. Wait seated in one of Chareau's comfortable leather and Lurçat tapestried chairs.
1.10 Sweep chair, especially its crevices and folds.

BLACK LACQUERED DOOR 2 **[44]**
Whilst waiting, watch the transparent glass window framed next to a second black lacquered full height valve shaped door in the wall of the receptionist's booth facing onto the waiting area. A figure will appear smudged, moving across the glass, just before the door opens towards you and the doctor appears.

DOCTOR'S CONSULTING ROOM **[31]**
Follow the doctor along between the outside of the receptionist's booth and the inside of back wall of the house, again lensed **[40]**, up 3no. risers, and through into double height doctor's room. (As you pass the receptionist's booth glance to the right through the transparent glazing to this edge and through the first black door, which is now open, back along the corridor and out through the clear glazing of the front wall

of the house. You will see the dark entrance passage, you came in along.) The flooring is still Pirelli white rubber. Sit again on a Chareau timber framed leather seated chair and talk to the doctor who sits with his back to the light.

EXAMINATION ROOM **[34]**
Get up, turn around 180° and move through a heavy full height soundproofed sliding screen surfaced with polished perforated aluminium into the examination room. The flooring is now white travertine tiles. To the right the wall is painted a pale puce colour. Ahead the wall is lined with a reflective white glass surface. There is a circular booth to the left **[35]**. Enter it and undress. When you are completely naked come out and stand in front of the doctor, before lying down on the orange rubber examination table to the left **[36]**.
1.11 Brush the inside floor to the circular booth.
1.12 Sweep around, on and underneath the exam table taking particular care with the mechanisms and complexity of surfaces on and under the table.

SURGERY **[37]**
Move through the examination room towards the front of the building to the right through a white lacquered full height door, into the surgery. On you right as you do this you will notice there is a double sided glazed vitrine [53] with glazed sliding doors between the surgery and examination room. Overall this measures 1.3 x 1 m. Peer into it before lying on the surgical table to have your surgical procedure **[30]**. Notice the inside of the lensed front wall of the house before you, and the shadow of the bell post adjacent to entrance. **[17]**.
1.13 Sweep the inside of the vitrine thoroughly making sure the corners a swept. Use the fine brush.
1.14 Brush the inside concave surface of the glass lenses.
1.15 Sweep whole floor.

Ground / First / Second Floor Sweep

SERVANT WING **[29]**
After resting, start the following sequence. Start this time inside the servant wing on the ground floor. At the full height side window overlooking entrance and front courtyard **[29]**.
1.16 Brush the concave lenses to facade.

LAUNDRY ROOM **[49]**
Ascend two floors using the servant stair and communal first floor stair, to the laundry room. Here a large clear glass window looks down into the salon.
1.17 Clean the glass using the white linen cloths.

BATH **[50]** SHOWER **[51]**
Move around the upper floor from the servant's laundry to the master bathroom. Here at the farthest end, near the back of the house are situated the bath of Madame with its hinged shutters, adjacent to the shower cubicle of the doctor, lined with white mosaic glass.
1.18 Clean the bath using the white linen cloths, paying particular attention to the upper surfaces out of reach.

GIRL'S BEDROOM **[47]**
From the master bathroom walk along corridor to end bedroom.
1.19 Brush out bathroom area behind screens.

First Floor Sweep

SALON **[20]**
Now ascend through the house one floor again to complete the final three spaces. The salon lies at the front of the house. Go to the platform at the top of the main stair inside the glass lens wall and situate yourself in the position as Madame did to greet visitors at the top of the stairs, several steps back with the light coming from behind her. **[56]** The floor surface is again Pirelli white rubber.
1.20 Sweep an area (1000 x1000 mm) under bookshelves.

MADAME'S BOUDOIR **[42]**
Swivel round to the left and ascend 1no. step into the Salon proper. Turn to the left into the centre of the building and then to the left again down 2 no. Steps and along to the right into Madame Dalsaces's boudoir. Go in and turn to the right and look back, through the glass, down to the clinic **[32]**, and across into the doctor's office space [**41**]. The tiny space you are standing in is sometimes called the winter garden.
1.21 Sweep the floor.

TELEPHONE BOOTH **[46]**
Trace back your steps into the Salon and then turn to the left into the doctor's office. To the right is a completely enclosed booth, the doctor's telephone booth. Enter it and shut the door. It is completely soundless and equally sound cannot escape.
1.22 Brush walls of the booth and sweep the interior floor.

2 Findings

COLLECTIONS [see plates 100 104]

- Dust Samples of collected remnants
- Folded Paper Samples
- Cloth Samples [lost]
- Decayed Materials (with room location eg. **[42]**)

SOUND MATERIAL††

- First recording of sweeping under examination table. **[34]**
- Second recording of sweeping under examination table. **[34]**
- Recording of sweeping glass lenses. **[37]**
- Recording of sweeping of Madame's winter garden. **[32]**
- Recording of sweeping interior of telephone booth. **[46]**

SMELL [lost]

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†† These results do not appear in this document. See 'Air' for sound recordings.

Plate 100: Dust Samples.

Numbers refer to Dust Sweeping Schedule and Plans above. (Numbers in brackets refer to Plan layout.)

2.04 Area (300 x 300 mm) of granite setts in middle of courtyard, at a point measured equidistant from each façade enclosing the space **[21]**.
2.06 Entrance doors threshold and along lensed façade and around base of bell column **[25]**.
2.08 Main stair **[45]**.
2.10 Leather chair, waiting room, ground floor **[39]**.
2.11 Inside circular booth, examination room, ground floor **[35]**.
2.12 Around, on and underneath the exam table, examination room, ground floor **[36]**.
2.13 Inside of vitrine between exam and surgery, ground floor **[53]**.
2.14 Concave surface of the glass lenses, surgery, ground floor **[37]**.
2.15 Floor to surgery, ground floor **[37]**.
2.16 Concave lenses servant wing, ground floor **[29]**.
2.19 Girl's bathroom area behind screens, third floor **[47]**.
2.20 Area under bookshelves, salon, first floor **[19]**.
2.21 Floor to boudoir, first floor **[42]**.
2.22 Walls and floor of telephone booth, first floor **[46]**.

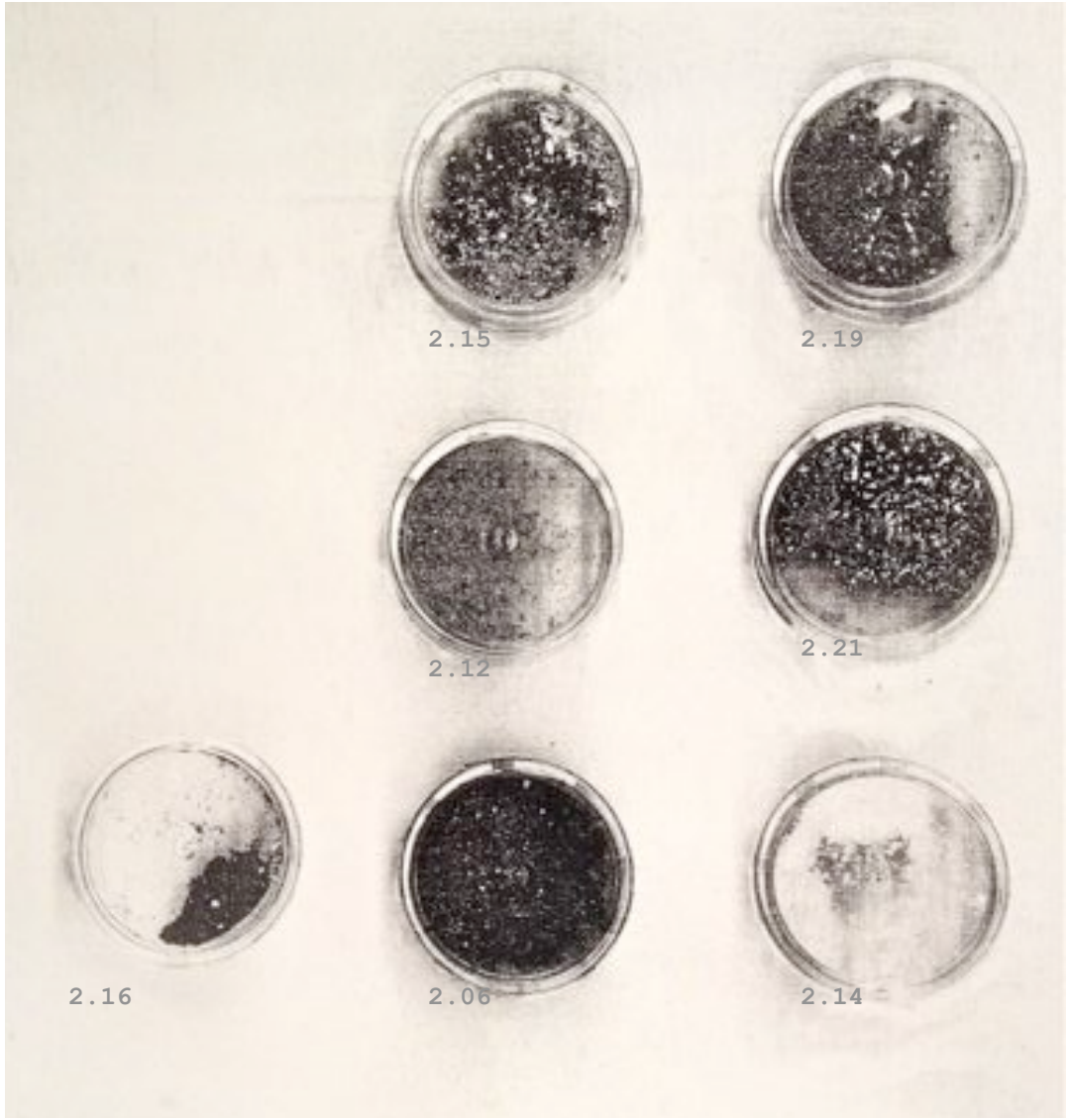
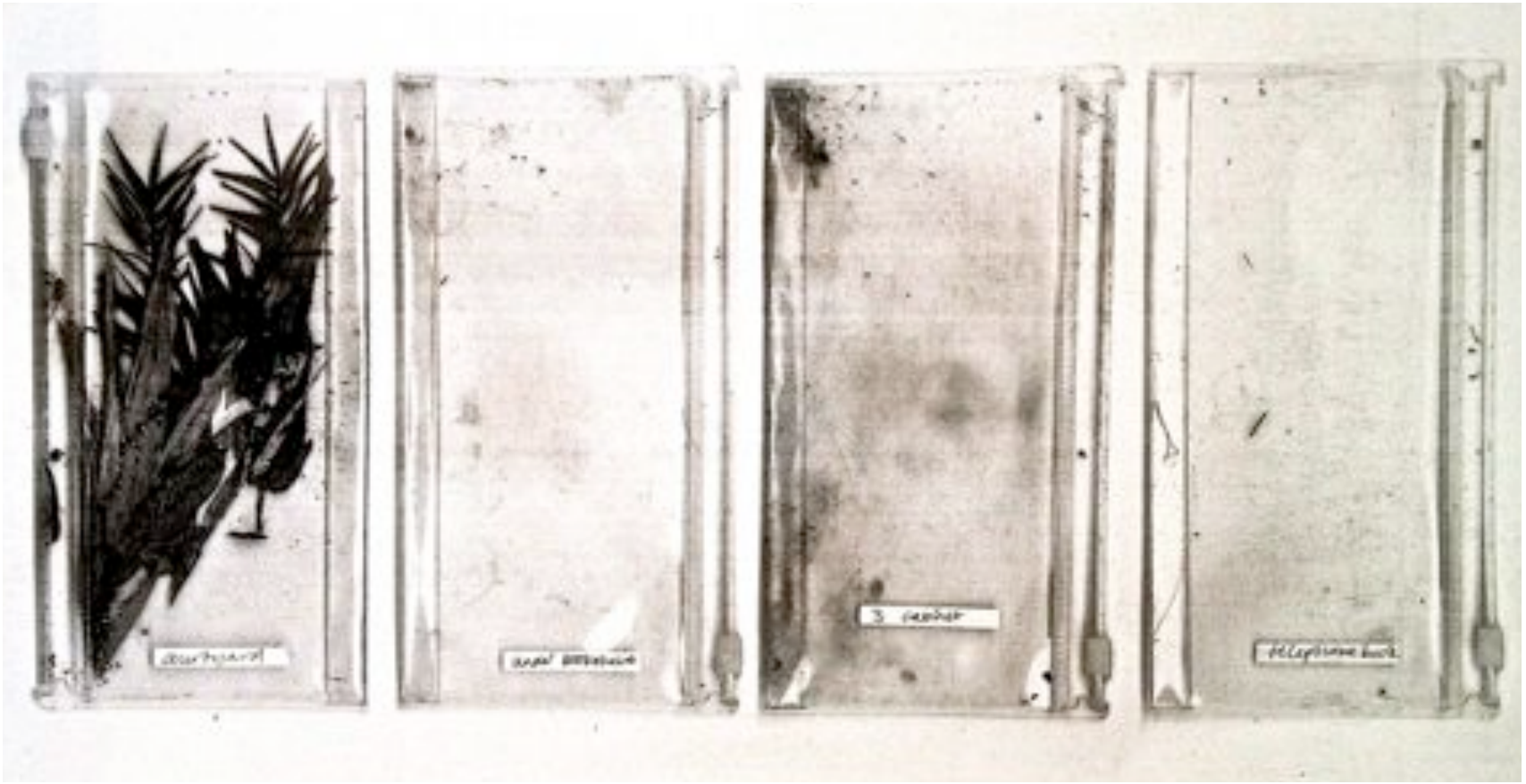
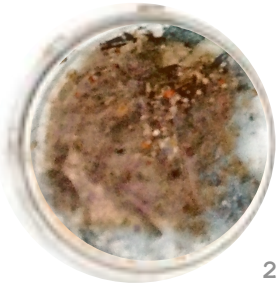


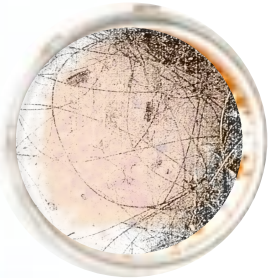
Plate 101: Dust Samples.
Numbers refer to Dust Sweeping Schedule and Plans above.



2.04 2.20 2.13 2.22

Plate 102: Dust Samples.
Numbers refer to Dust Sweeping Schedule and Plans above.

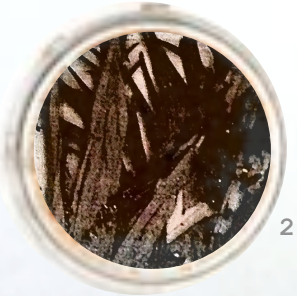

2.08


2.10


2.15


2.19


2.13


2.04


2.12


2.21

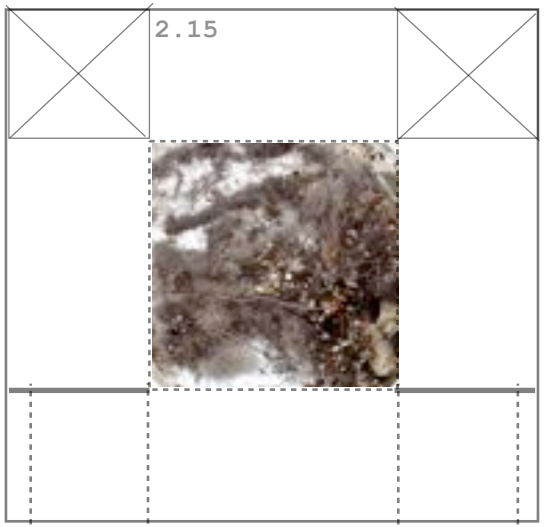

2.11

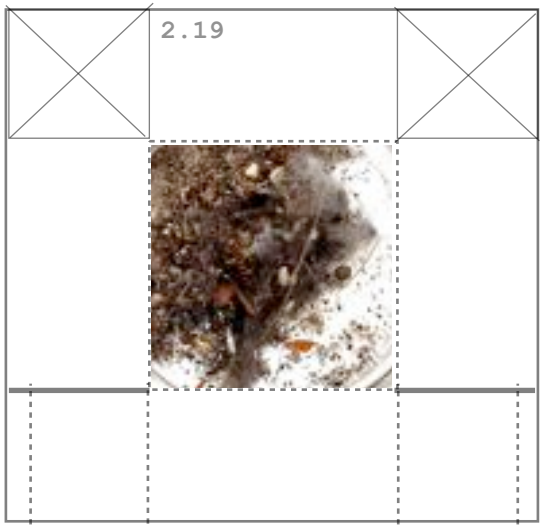

2.16

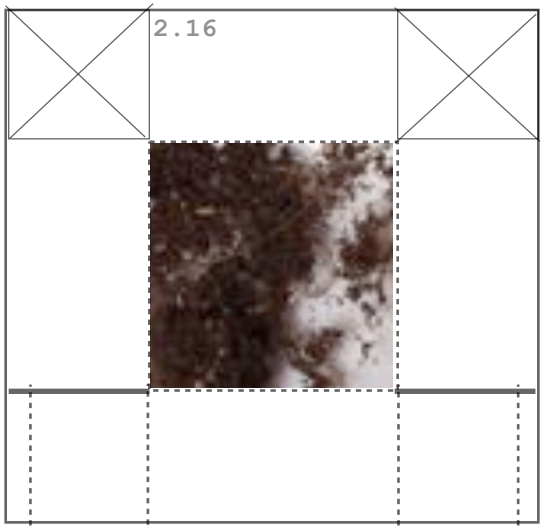

2.06

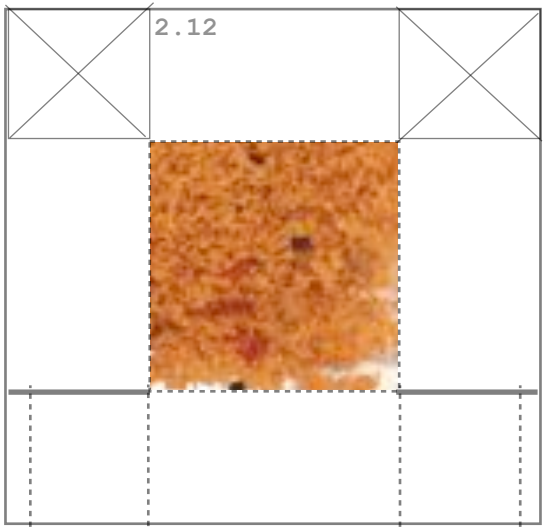

2.14

Plate 103: Folded Paper Samples.
Numbers refer to Dust Sweeping Schedule and Plans above.









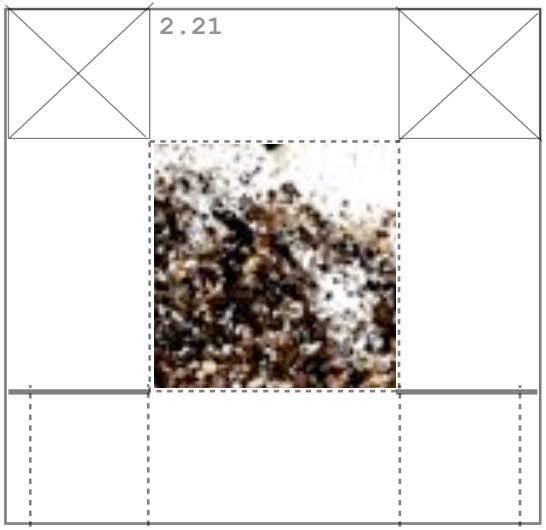
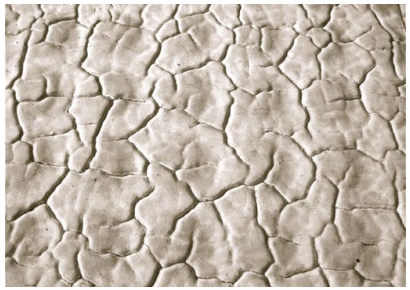


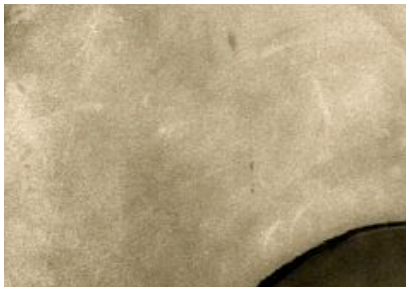
Plate 104: Decayed Materials.
Numbers refer to Dust Sweeping Schedule and Plans above.

[**25**] glass to sliding door



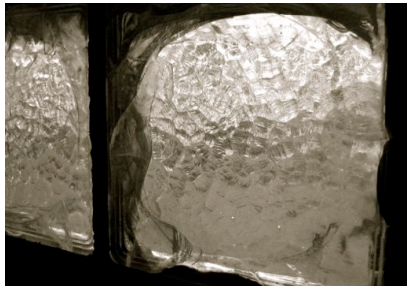
[**19**] Pirelli floor

[**42**] leather table top



[**39**] leather chair

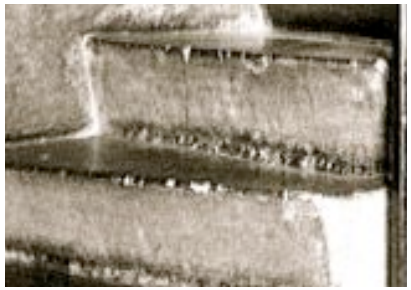
[**36**] rubber examination table



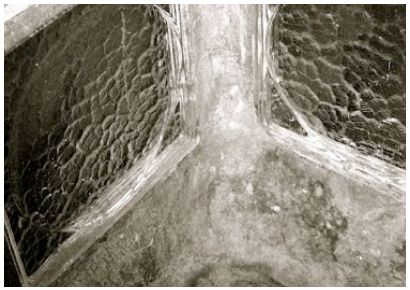
[**31**] glass lenses

[**34**] travertine floor tiles

[**26**] glass to screen



[**54**] concrete stair to first floor



[**26**] concrete / glass to passage corner

3 Interpretation

- House Re-mapping [Plate 105]
- Dis-section A with Scale [Plates 106 108]
- Dis-section B with Scale [Plates 109 111]

Plate 105: House Re-mapping.

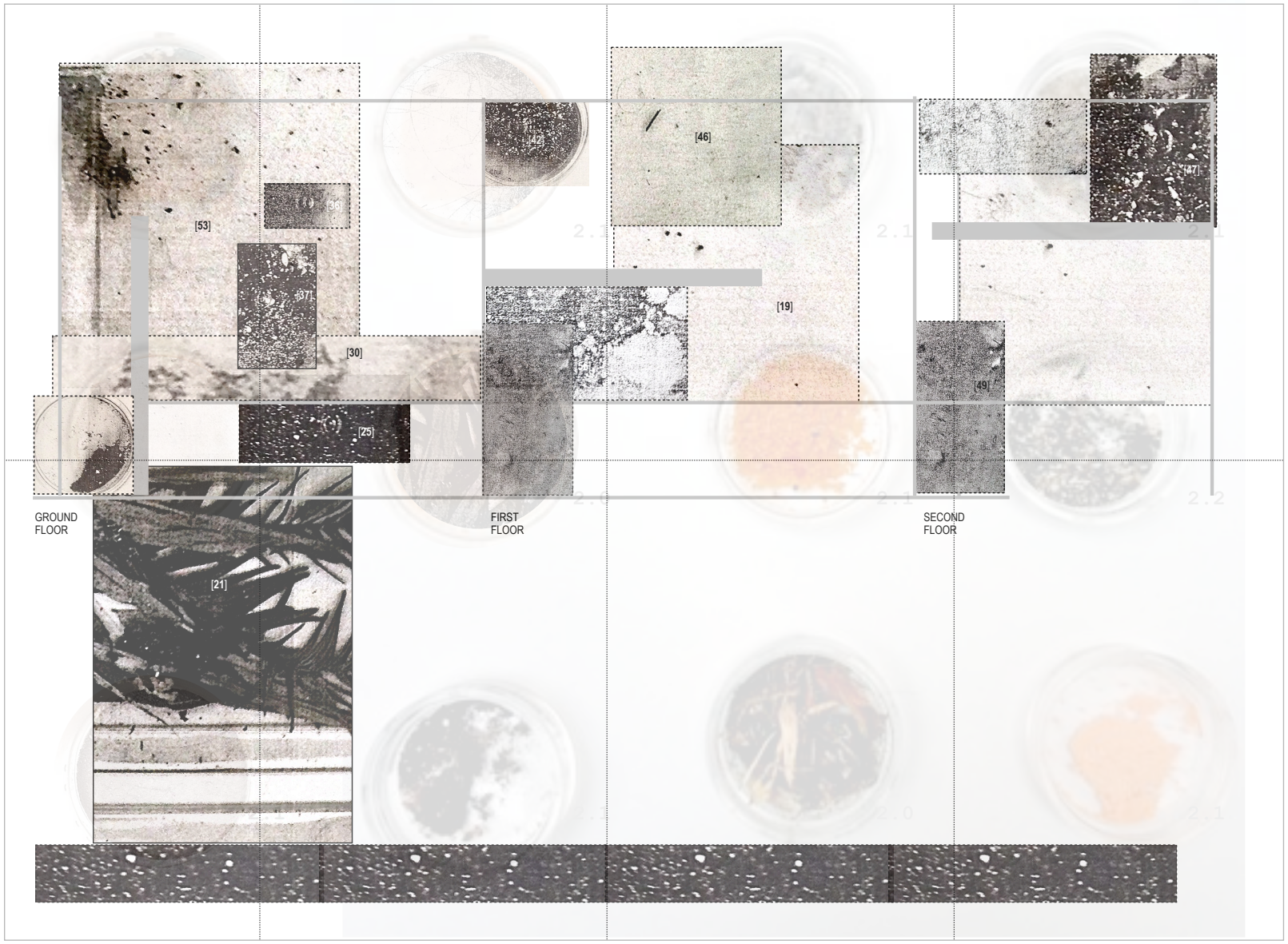
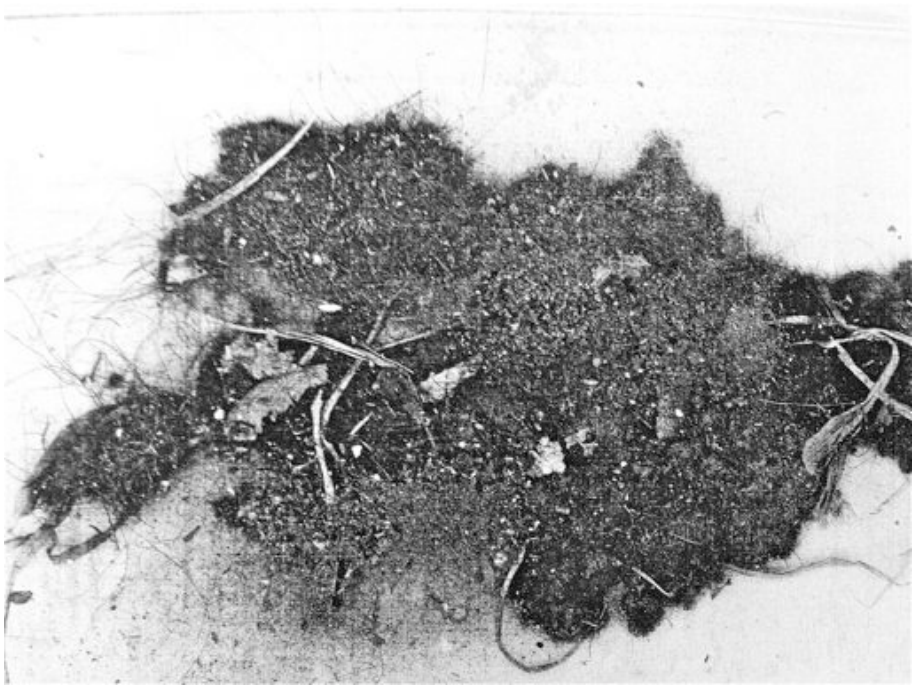


Plate 106: Dust Di-section A.

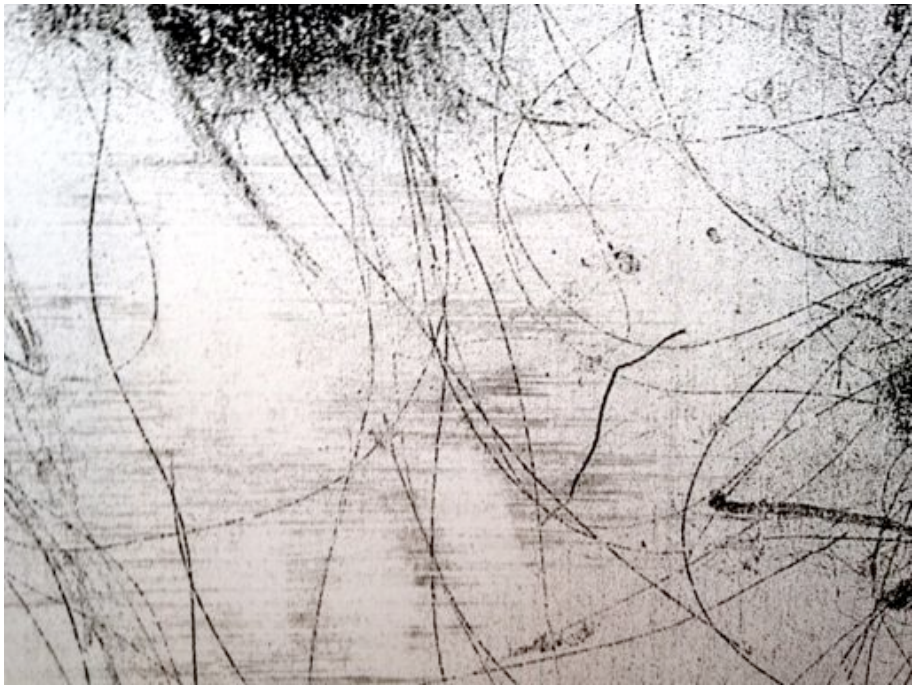


A1 1:1

A2 2:1

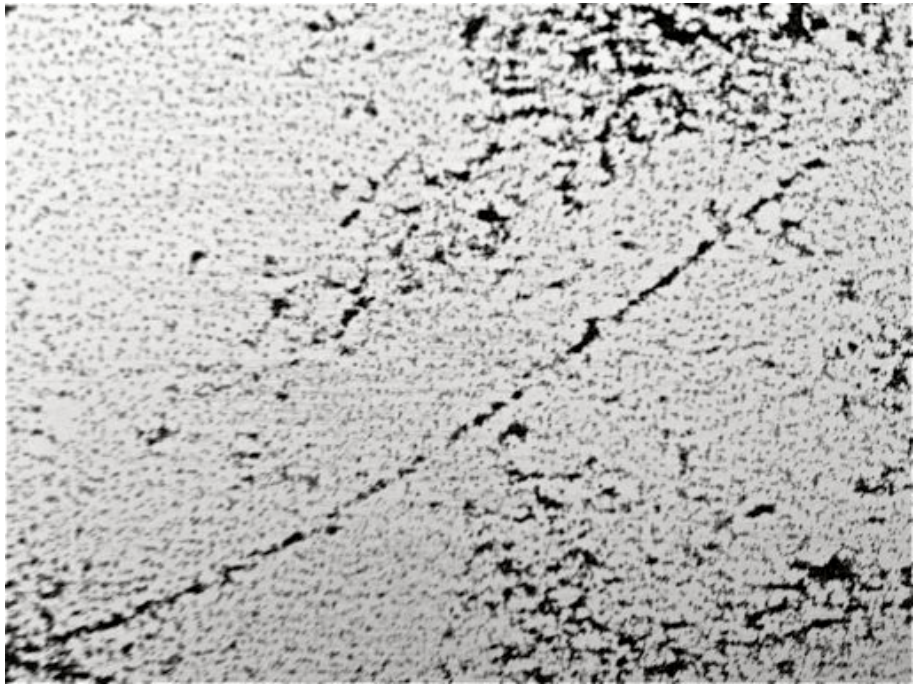
Plate 107: Dust Di-section A.

A3 4:1



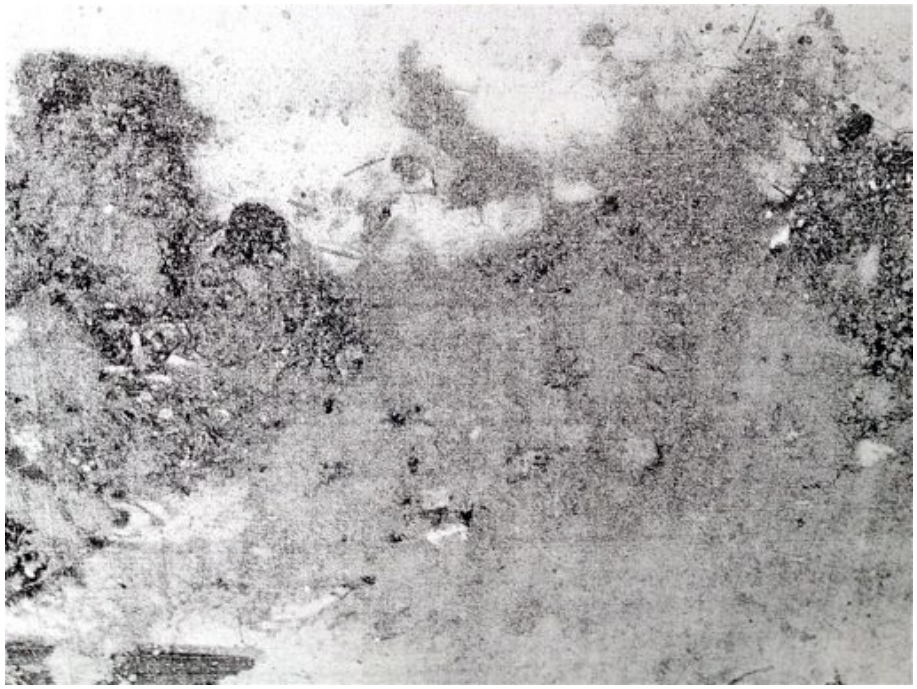
A4 8:1

Plate 108: Dust Di-section A.

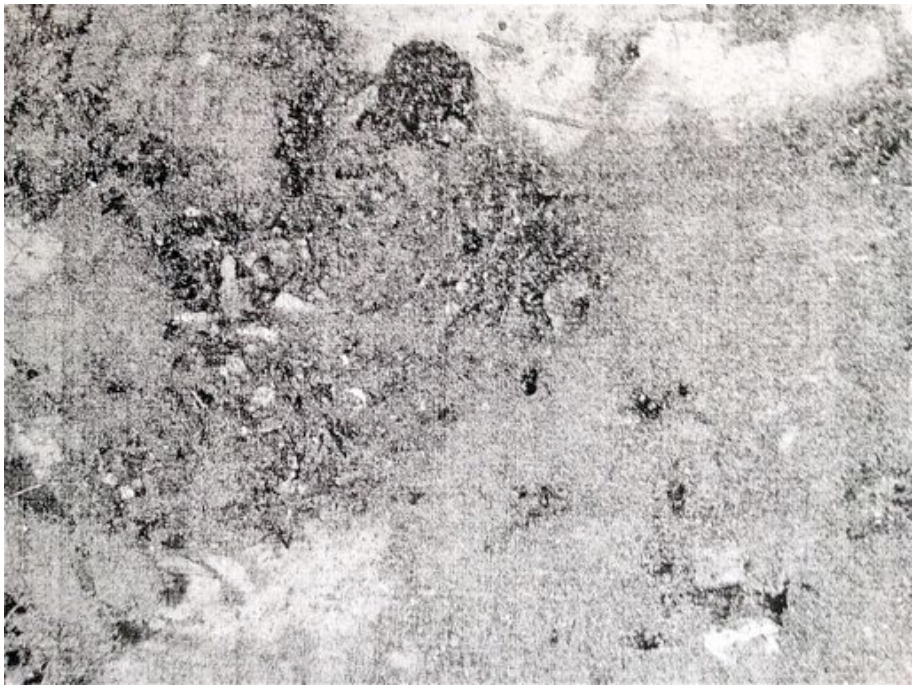


A5 16:1

Plate 109: Dust Di-section B.

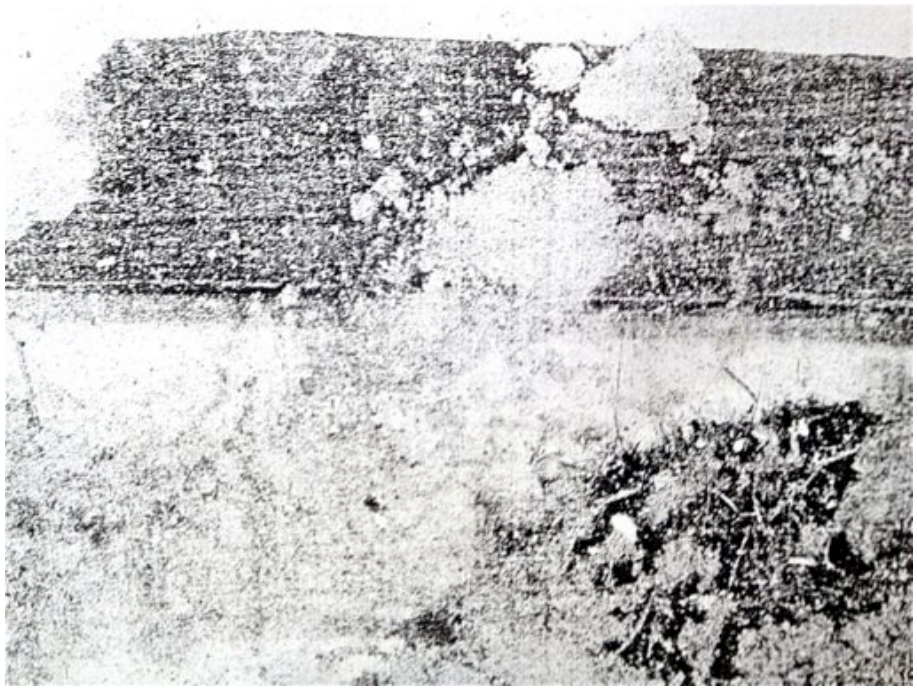


B1 1:1



B2 1.5:1

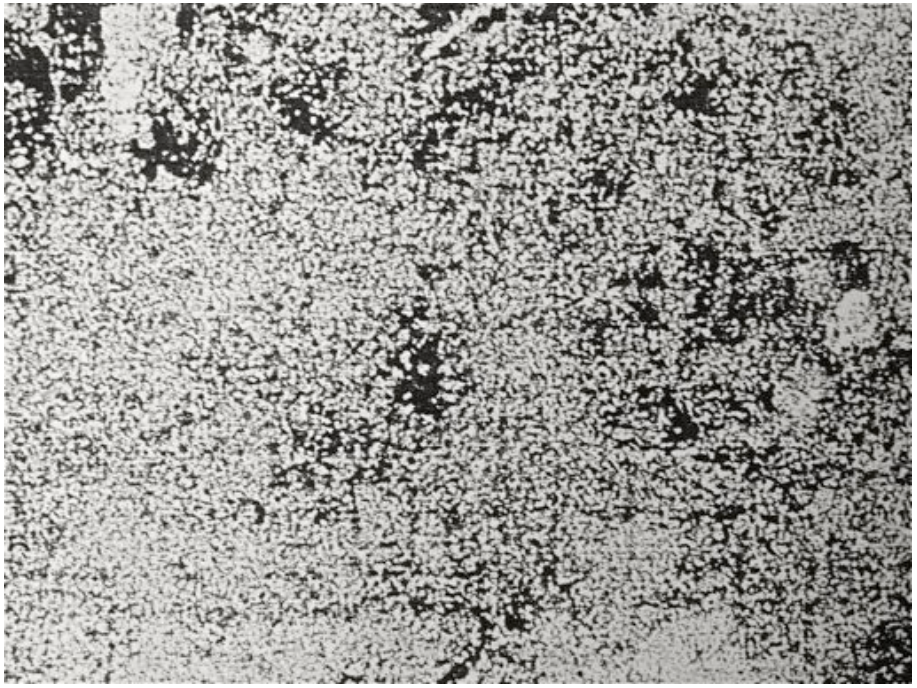
Plate 110: Dust Di-section B.



B3 4:1

B4 8:1

Plate 111: Dust Di-section B.



B4 16:1

As the housekeeper, I looked closely at the dust, increasing its scale by up to 16x, looking for microscopic elements of the households which had passed through the building [Plates 107–11]. Little of it was certain. In fact it told me less than I already knew. As Jacques Derrida noted, memory is distinct from the archive. The archive points to the death of memory.[122] The outcome of my own dust collection hence suggested death. I literally encountered this deathliness through its smell, dirtiness, allergenic qualities. Yet I remained fascinated by the dust. I returned to the *Maison de Verre* and did the sweeping again recording the decay of materials, the lines inscribed in them [Plate 104].

Eventually, the dust made me ill. I was stuck in its circularity, the women's lost experience. The act of sweeping, though, remained a powerful mode of investigation. As a process rather than a preconceived outcome, collecting the dust from the house undermined the prevalence of the vision. I began to know it through sweeping it clean. Decay is blind, feeling takes over vision.[123] Lying on the floor, or crouching down underneath the medical equipment I was measuring it through touch – inhaling it, sneezing it.

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[122] Jacques Derrida, *Archive Fever: A Freudian Impression*, (trans.) Eric Prenowitz (London: University of Chicago Press, 1996), 14, 27.

[123] Irigaray has extensively argued that western thinking prioritises vision over touch. See *This Sex Which Is Not One* [1977] (New York: Cornell University Press, 1985); and *The Ethics of Sexual Difference* [1984] (New York: Cornell University Press, 1993). As Kelly Oliver establishes, Irigaray follows Merleau-Ponty's thinking, who 'describes vision in terms of thickness, corpuscles, tissues, grains, waves, channels, circuits, currents, embryos, and pregnancy, the very corporeality out of which sensation, thought, and language are born.' See Kelly Oliver, 'Vision, Recognition, and a Passion for the Elements', in Maria C. Cimitile and Elaine P. Miller, (eds.), *Returning to Irigaray: Reflecting on the Early and Late Writings* (Albany: University of New York, 2007), 122–3.

Figure 5.26: (**top**) Brassaï, *Passerby in the Rain*, 1935.
(**bottom**) Medical objects.

Writing Dust / Motes

If dust is a clue, it only gains status through my interpretation, and imagination. It is rooted in the fictional. In this sense dust is a metaphor for fiction. Searching for the housekeeper and the patients, I turn back to writing. It is in fiction that they may be found. I begin to write the story of the housekeeper.

In the inter-war milieu, female writing observing the minutiae of everyday life as narrative flourished. The majority of these women were wealthy expatriates or, if French, from privileged backgrounds.[124] They were not, on the whole, working out of financial necessity, but were ready to claim an alternative role for themselves.[125] They occupied spaces between the public and private realm, setting up bookshops or small boutiques, working in studios or making their homes into studios or salons, even working in their hotel lodgings or cafes.[126] They occupied the margins of political life in the Latin Quarter and Saint-Germain-des-Prés. The latter, the location of the *Maison de Verre*, offered a diverse community of women 'the freedom to work' [figures 5.27, 5.28].[127] The city's public attention was elsewhere, on the depression, impending war, working class unrest.

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[124] Most of those who stayed on in Paris after the 'crash' of 1929 were forced to leave France shortly after 1940 and the occupation. See Weiss, *Paris Was a Woman* (1995), 226.

[125] Marilyn J. Boxer demonstrates that feminism was a progressive bourgeois movement, 'distinct from the support of proletariat rights'. See Marilyn J. Boxer, 'Foyer or Factory: Working Class Women in Nineteenth Century France', in *Proceedings of the Second Meeting of the Western Society for French History*, Vol. II (Austin, Best Printing Company, 1974), 206.

[126] Adrienne Monnier and Sylvia Beach opened bookshops, Gertrude Stein and Nathalie Barney held weekly public salons, Jean Rhys wrote her novels in her hotel room or in cafes, as did Simone de Beauvoir. Weiss, *Paris Was a Woman* (1995).

[127] Weiss, *Paris Was a Woman* (1995), 19. See also Nicholas Hewitt, 'Shifting Cultural Centres in Twentieth-century Paris', in Michael Sheringham (ed.), *Parisian Fields* (London: Reaktion Books, 1996), 30–45; 40.

Writing and publishing were viable forms of expression. There is some evidence that more women wrote than in the previous century, in a period where the avant-garde had shifted from painting to writing and publishing.[128] Women traded their backgrounds for a creative life. Simone de Beauvoir, for example, lived frugally in a single room of a public *hôtel* eschewing her parental home and wealth. She saw writing as an active resistance to the constraints of marriage and childbearing. She writes frequently of freedom, of expression through writing and about the city as a space: 'All Paris was incarnate in me, and I recognized myself in every face I saw.'[129] For her, Paris *was* the freedom to write.

As I have explored, the ability to live in this way was partially endorsed by the control of one's fertility, a refusal of the procreative social context. Amongst these women there was a largely unspoken rejection of marriage and motherhood. The population, already decreasing before and during the First World War,

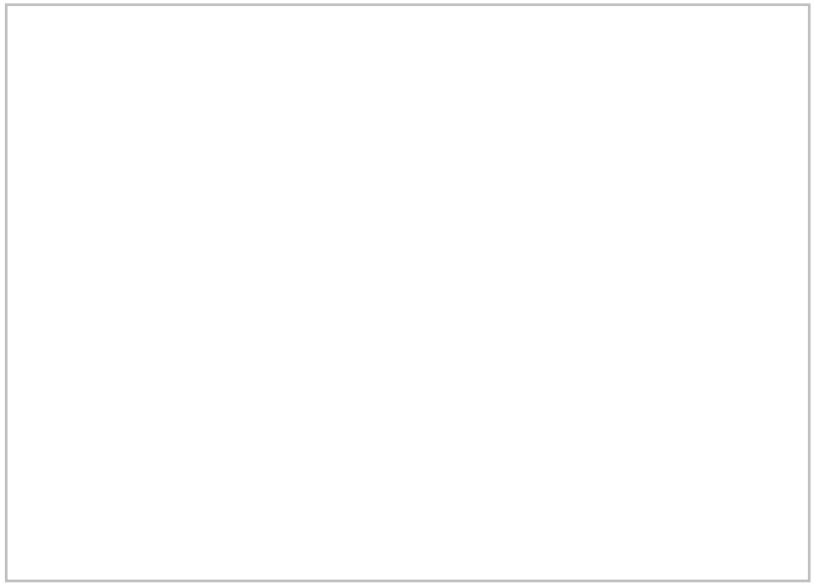

Figure 5.27: Map, Shari Benstock, *Women of the Left Bank: Paris 1900-1940* (London: Virago, 1986), xii–xiii.

[128] Marcelle Marini, 'The Creators of Culture in France', in Françoise Thébaud (ed.), *A History of Women: Toward a Cultural Identity in the Twentieth Century* (Cambridge: Belknap, 1994), 297–323. Also see Hewitt, 'Shifting Cultural Centres in Twentieth-century Paris' (1996), 43. Some of these women have been marginalised or forgotten for good reason (as argued by Anne Sauvy in 'Les Littérature et les femmes', in Roger Chartier (ed), *Histoire de l'edition francaise*, vol. 4, 1900–1950 (Paris: Promodis, 1986), cited by Marini, 'The Creators of Culture in France' (1994), 297–323). Opportunities arose as much from progression in publishing as political changes, yet my point still stands that a wide variety of writing an early '*écriture feminin*' was present, even though it was seen as a remnant.

[129] Simone de Beauvoir, *The Prime of Life*, (trans.) Patrick Green (Harmondsworth: Penguin, 1962), 600. See also pages 11, 15, 20–21, 58. See also Simone de Beauvoir, *When Things of the Spirit Come First* [1937], (trans.) Patrick O'Brian (London: André Deutsch, 1982).

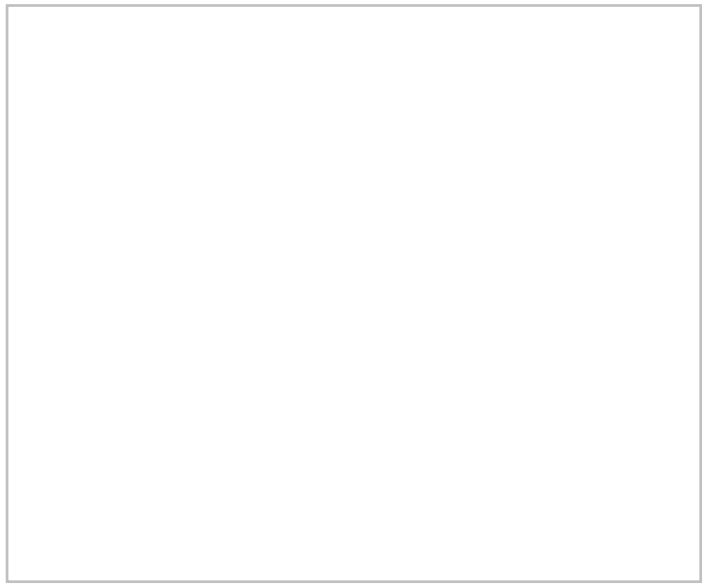

Figure 5.28: Map, Humphrey Carpenter, *Geniuses Together: American Writers in Paris in the 1920s* (London: Faber and Faber, 2009), endpaper.

continued to do so, demonstrating the increasing freedom women had.[130] As Andrea Weiss points out 'the goal was to have their lives belonging to themselves […] virtually all the women writers and artists in Paris had neither husbands nor children.'[131] Or as Sheri Benstock argues: women, particularly expatriates, were permitted to avoid 'the patriarchal script of marriage and motherhood enforced in other cities of the world'. Domesticity was substituted by writing. She continues, 'Rejecting the image of Paris as an object of men's lustful desires, these women rewrote the cultural script through their own lives.'[132]

It is unlikely that the housekeeper would ever have had such a voice. In a sense she was of no fixed place. Nothing is known about her, but by imagining her through writing I give her, to borrow from Theodor Adorno, 'a place to live'.[133] I write her through myself, as in the end it is through my process of cleaning the house that I understand her role. Her character, and the events she witnesses are inspired by certain writers whose work deals with hardship, relationships and disappointment, namely Colette, Violette Leduc, Jean Rhys and Anaïs Nin.

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[130] On the contrary the percentage of employed working-class women decreased in the inter-war period. See Felicia Gordon, *Early French Feminisms, 1830–1940: A Passion for Liberty* (Cheltenham: Edward Elgar, 1996); McLaren, 'Abortion in France' (1978), 461–485; McLaren, *Sexuality and Social Order* (1983); Roberts, *This Civilization No Longer Has Sexes* (1994).

[131] Weiss, *Paris Was a Woman* (1995), 21.

[132] Shari Benstock, *Women of the Left Bank: Paris 1900-1940* (London: Virago, 1986), 448. Victor Margueritte's novel *La Garçonne* is a famous, if cliched, example depicting a heroine who with her short hair, emancipated relationships and career, 'thinks and acts like a man' ['pense et agisse comme un homme']; see Victor Margueritte, *La Garçonne* [1921] (Paris: Flammarion, 1978), 127.

[133] Theodor Adorno, *Minima Moralia: Reflections from a Damaged Life* (trans.) E. F. N. Jephcott (New York; Verso, 1991), 87, cited by T. J. Demos, *The Exiles of Marcel Duchamp* (Cambridge, Mass.; London: MIT Press, 2007) 39.

Colette draws out issues of fertility, freedom and relationships for educated or talented girls living close to poverty.[134] Leduc's *Ravages*, based closely on the author's life, describes her botched abortion, near death experience and recovery in 1939. Rhys supplies details on women's occupation of public spaces and buildings. Her fictional works are autobiographical interpretations of life for single women. She paints pictures of despair, hope and ineptitude through her peripatetic characters who live their internal private lives publicly, watched from the outside, in the spaces of cafes, shops, streets and hotels. Rhys' writing has a sparseness which focusses on evoking everyday, banal detail. Nin's 1930s diaries are a particularly frank view of a writer's daily life, with details on pregnancy, childbirth and loss.

Finally, the later novel of *nouvelle-vague* writer Alain Robbe-Grillet, *La Jalousie*, gives structural inspiration.[135] *Jalousie* translates twofold as jealousy and a louvred window. The subject of the novel is therefore both spatial, as seen or not seen through the window, and emotional. The story is from an untold viewpoint, with a narrator, who may be the cuckolded husband, watching (through the louvres) his wife's relationship with their neighbour. The narrator floats detached and the fragments of story repeat as the narrative moves slowly forward. The text

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[134] Violet Leduc, *La Batârde* [1965], (trans.) Derek Coltman (Normal: Dalkey Archive Edition, 2003) and Violet Leduc, *Ravages* [1955], (trans.) Derek Coltman (St. Albans: Panther Books, 1969). Colette, 'Gribiche' [1937], in Elizabeth Fallaize (ed.), *Oxford Book of French Short Stories* (Oxford: Oxford University Press, 2002); Colette, *The Stories of Colette,* (trans.) Antonia White (London: Martin Secker and Warburg Ltd, 1958); Jean Rhys, *After Leaving Mr. Mackenzie* [1930] (London: Penguin, 1971); *Good Morning, Midnight* [1939] (London: André Deutsch, 1967); Simone de Beauvoir, *When Things of the Spirit Come First* [1937], (trans.) Patrick O'Brian (London: André Deutsch, 1982); Anaïs Nin, *Incest: From a Journal of Love: The Unexpurgated Diary of Anaïs Nin* [1931–4] (London: Peter Owen, 1993); Kay Boyle, *My Next Bride* [1934] (London: Penguin, 1986).

[135] Alain Robbe-Grillet, *La Jalousie* (*Jealousy* [1957]) (London: Oneworld Classics, 2008).

is accompanied by a plan drawing outlining the positions of repeated sequences of events within the house and its surrounding landscape.

'Motes', the fictional text following then, voices the *Maison de Verre* through the housekeeper in 1933.[136] I write her observation of a scene: the house, its space, object and procedure. Her role as observer both subjugates her – seeing dust necessitates its cleaning – and gives her a silent position of power as she notes the true occurrences in the house. It is her observation of a patient visiting, that allows me to speculate that Mary Reynolds, Duchamp's lover in the 1920s and 30s, visited the house, an idea pursued in 'Mary Reynolds' following.

The story is voiced as a series of fragments, each located in a part of the city or the house. The descriptions of the places are described as if architectural annotations to drawings, in Arial narrow. The accompanying maps and plans have numbered clues which can be cross-referenced to the text accordingly [Plates 113–5]. The housekeeper describing the house, its dust and the patient is written in Didot italics. As the story advances it seems less clear who is speaking – the housekeeper and patient merge, my voice as narrator (Didot roman) begins to stand in for the occupants of the past, in the present.

[136] The word motes is intended to be a play on *mots*, French for words.

Motes

Plate 112: City map, marked with writers' and characters' locations, 2011.

[1]–[16] City Map 1933

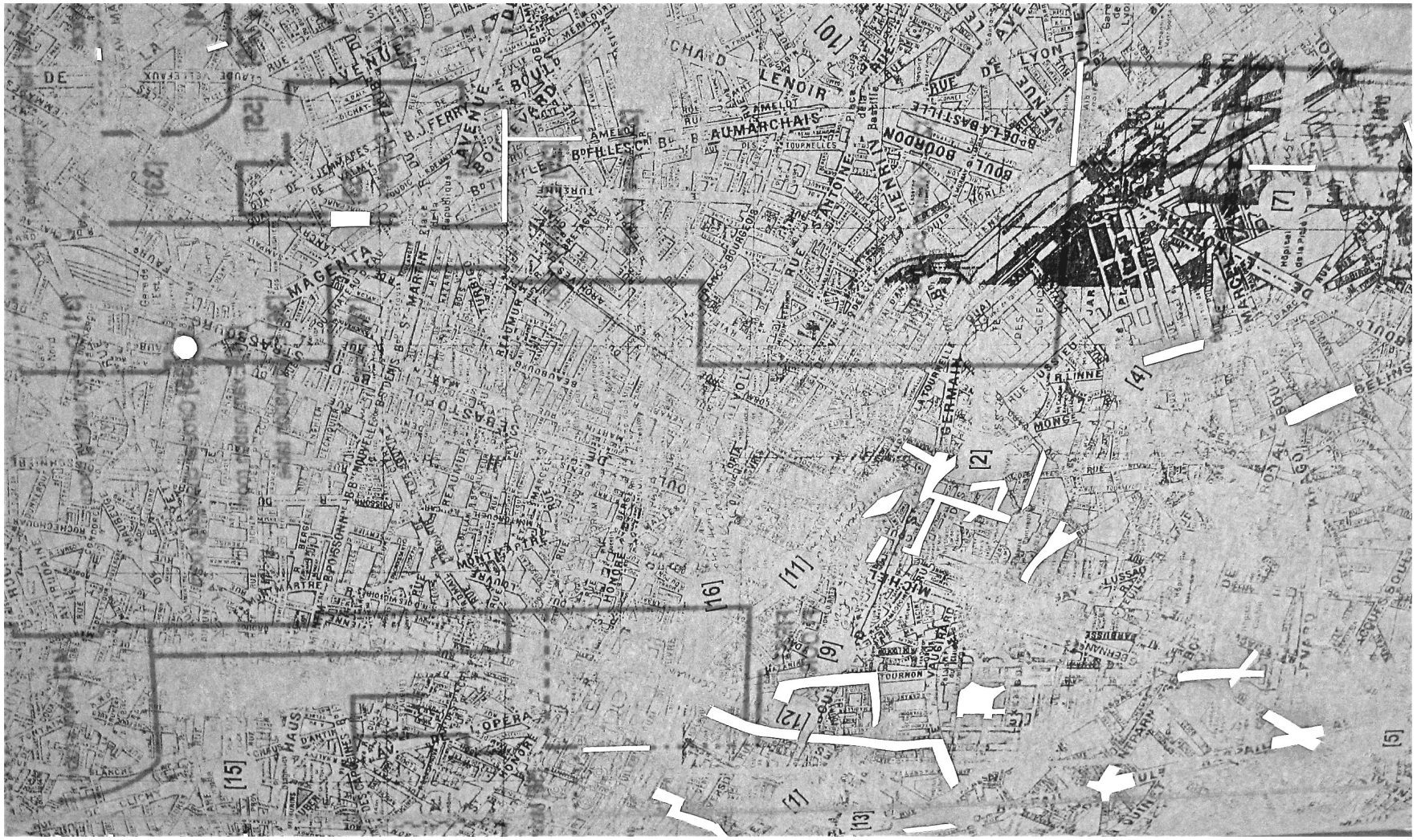


Plate 113: Plans, marked with clue locations, 2011.

PLANS

[17]–[57] *Maison de Verre* 1933

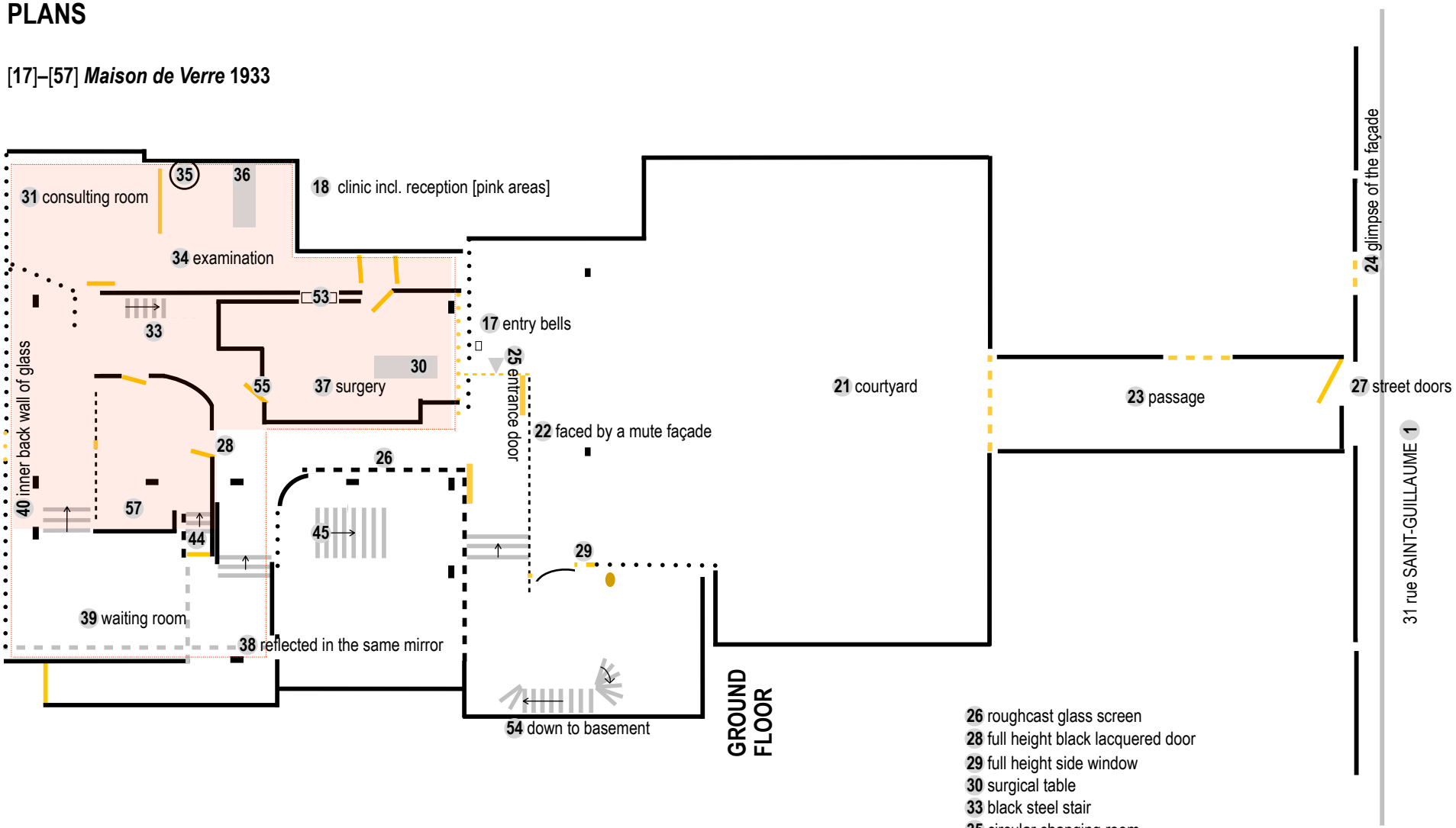
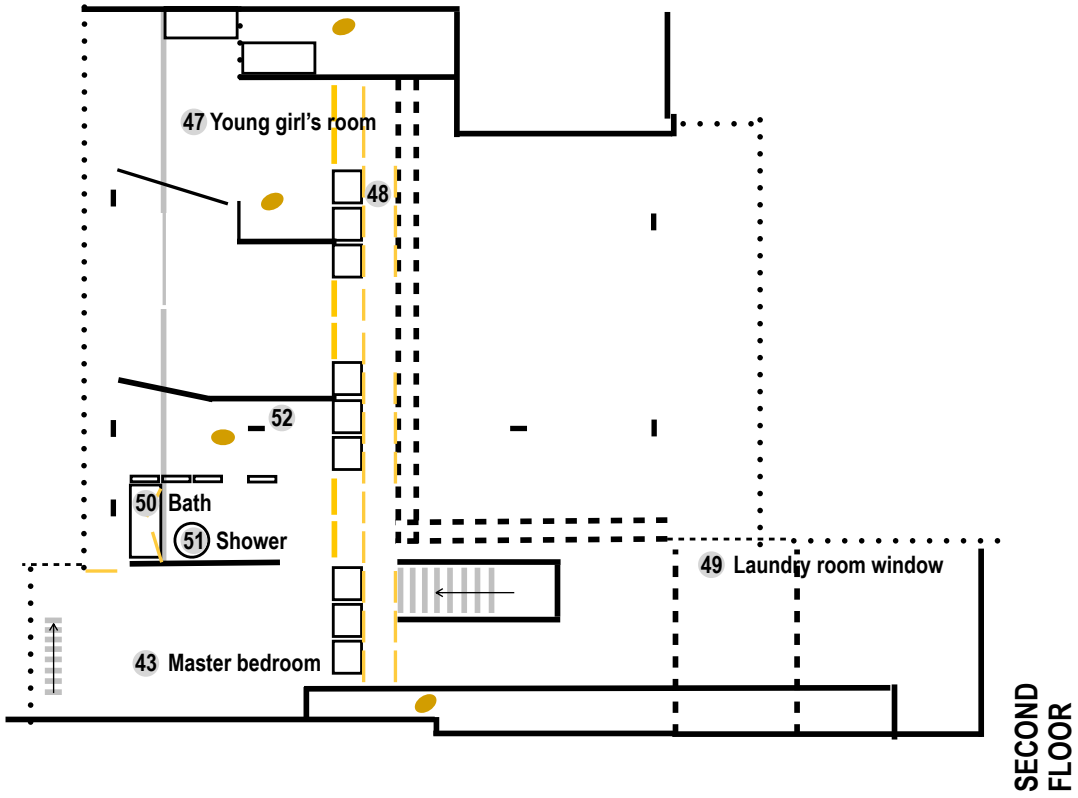


Plate 114: Plans, marked with clue locations, 2011.

20 little hatch in the corner
33 black steel stair
46 telephone booth

Plate 115: Plans, marked with clue locations, 2011.



48 Young girl's corridor
52 Hinged mirror

STREET [1]

It is 1933. You turn off the wide Boulevard Saint-Germain onto rue Saint-Guillaume: a narrow street lined with eighteenth century *hôtel particuliers*. No. 31 is modest, three-storeys, plain façade, with a central entrance and large forest green painted doors [**27**]. A carved keystone head sits over the masonry arch. The shuttered windows are closed to the ground floor.

I am the housekeeper here at the Dalsace House.

In 1909 I was twelve, but pretended to be fourteen, and started working at the Magasins du Louvre, in the hosiery department helping lay out the corsets. I never planned to stay there. I wanted to be someone. Which is why I had to find a way of getting on. It was years before I did though. Through Mme Chareau, one of our nicest customers, she was English I think, I was suggested to the Dalsaces – it was 1919 I think – who trained me as a housemaid. This was hard work, and I spent my whole time sweeping. Later when they moved to the glass house I became housekeeper, in charge of running it. I married Marc, the chauffeur. We sleep in a bedroom off my laundry room. We are the only live in servants and take charge of it all.

We are lucky and have not conceived a child. Mme Dalsace has always been very kind and advised me on this. I say lucky because if we had a child we would no longer be able to work here; I would find it difficult to work at all. We would lose my income, and our home. I wait anxiously each month for my menses. Soon I will be too old.

LAUNDRY ROOM [49]

Once inside the house ascend two floors to the laundry room via the servant stair and communal first floor stair. Here a large clear glass window looks down into the salon. Next to it another window allows you to see the courtyard.

My quarters are to the side of the main building, separate. I like to keep out of the way, but can oversee everything from here and move about unseen to clean, prepare and serve this family and their house. I work hard as I am the only servant indoors. When I was a cleaning maid, I swept and polished almost constantly, and always felt in the way of Mme. Now a daily maid cleans. I oversee her and organise the house and its laundry.

Every morning, early, I require the maid to polish away marks to the mirror, glass and black lacquer on the ground floor.I walk her around pointing out each smear and speck.

COURTYARD [**21**]

Exterior courtyard, a square enclosed space approximately 13m x 13m, faced with the façade to *Maison de Verre*, and enclosed on the other three sides by the *hôtel* to the street front and adjacent *hôtels* to sides. Floor set with large irregular granite setts measuring approximately 200mm x 250mm, with mortar joints.

The front of the new building is composed entirely of glass lenses on the upper two floors and clear glass at ground level [**22**]. The remaining third floor apartment can be seen above. The free floating façade wraps approximately halfway around the north flank to the courtyard. Entrance to the building is not visible. On closer inspection the façade is split at the centre of the ground floor level with a glass lensed inner layer to right and plate glass outer layer to left. To the right the courtyard ground becomes flooring of Pirelli white rubber studded tiles, set 25mm above setts. A waist height black steel post is set on this floor, outside the lensed layer of façade. It has 3 no. bells in a vertical row labelled from top 'DOCTEUR', 'VISITES', 'SERVICE' [**17**].

In 1933, the avortement, *the abortion, was as illegal as contraception. The penalties were very high. I once saw Mlle Reynolds come, I think for that purpose. She came in secrecy, wearing a strange hat and large overcoat. The doctor was taking a bigger risk, but as you know, he was supportive of the right to choose. Some, at that time, even now, would just take the money and perform the operation, botch it. It was dangerous to do it properly in so many ways ...*

I remember it now as if yesterday: the light-sharpened courtyard, blue sky falling, she stands facing the mute facade. The wet rough ground contrasts with the greenish translucent lenses. The clear glass at the entrance level is like mirror, the lenses to the right of the entrance thick, soft. There is no house. It is a mask, repelling and beckoning at the same time. She stands there while I watch. She hesitates, then touches the bell lightly. I activate the door, and watch her slip between two layers of glass, between outside and in.

ENTRANCE [25]

To the left of the bells two plate glass steel framed doors are set perpendicular to the outer and inner layers of façade. Ring the bell [**17**]. Enter through the left hand glass door. The entrance corridor to the servants' quarter runs along the façade. Instead step to the right into the body of building [**26**]. On the right is a wired rough-cast glass opening air vent to inner layer of front facade, and further inside on the same side, a curved piece of plastered wall. Floor continues as Pirelli rubber studded white tile.

The floor must be brushed down four times a day as even a light wind blows the dust across the courtyard onto the entrance area. It gets traipsed inside with people's feet and the raised circles of the white rubber show every speck. In those days we had so many visitors, especially patients during the day.

I alone clean the clinic, the cleaning maid is barred from those areas. As I clean I hardly have time to even think about what happens there. I know there used to be lists and records but I heard the doctor talk of changing names or removing them as time went on. Now, I think nothing is even written down. I know to keep quiet. Everywhere the intervention is swept under the carpet, as the English say. But it is not just the abortion or birth control that is secret. Working women are caught near the world of prostitution. If I lose my job that is the only other way I could make money. The bourgeois have the easier life but have politics and the church to deal with. We keep quiet.

PASSAGE [23]

It is early morning. You are on the street. Ring the bell and enter. The passage is a single storey tunnel through the apartments of the *hôtel*. It is 10.3m in length with an asphalt floor surface and upstanding limestone perimeter.

I see her shiver, steady herself on the wall. Perhaps she realises now that even if she changed her mind she has closed the door to the street and will either have to find the catch in the dark or go in and ask to be let out.

INTERIOR PASSAGE [26]

A long corridor with Pirelli flooring and screen of full height rough-cast wired glass panels along length to left, through which the shadowy outline of the stair to the first floor can be seen [**45**]. Wired rough-cast glass opening air vent to inner layer of front façade [**26**]. Black lacquered door to end of corridor [**28**].

As she steps inside I imagine her passage along the corridor into the building's interior. She wipes her hand on the white wall, leaving a trace of herself. The passageway is darker than expected, the light coming from elsewhere. The rest of the house appears as slices of repeating fragments: the skinny black hanging staircase, the curving layering reflecting screens hiding the main stair. She turns toward the waiting area to be confronted by a square mirror planted on the orange and black column. The huge portrait of Annie is to the right. As she moves towards the mirror she sees her groin area reflected – if I have set it to the right height. She floats down two steps to see her face framed in the same mirror.

WAITING ROOM [39]

An open space between lensed façade at rear [**40**] and main parts of the house. Leather upholstered chairs for waiting, and stiffened fabric screens hung from the ceiling for privacy.

She enters the waiting room at the back of the house, and sits on the edge of a leather chair imprinted by earlier visitors. She smooths her skirts over her knees and picks off a single hair. Before I slide the fabric screens around her, she looks back to the main stair rising into the light. The front wall of glass is repeated softly at the back delaying her between two planes of translucency. The back wall though is not quite the same as the front, as it is lined with orangy red mechanistic stripes of steel and window opening devices. The afternoon sunlight coming through the glass picks out motes of dust floating in the air.

The receptionist's office is a white floating block in front of her. There is a section of clerestory glazing and a very tall black lacquered door to the right. She can see the blur of her bright scarf reflected in it. A clear vertical window is perpendicular to it. Suddenly the doctor appears in this window from inside the office. He jerks forwards and down descending an internal stair she cannot see. He is shadowy and the light bounces off the glass fracturing the image of him as he moves

across it. The black lacquered door opens to swap her image for his. He stands real in front of her.

He greets her, and they walk together along the lensed back wall, the sharp heels of her shoes marking out the route on the rubber floor. To her right she catches a long view back through the reception area to the front of the house and into the courtyard.

CLINIC [18]

The clinic comprises much of the ground floor of the building. A suite of spaces it begins at the shared front door and includes the first corridor you reach [**26**], the reception booth tucked in the middle of the building [**57**], a waiting area to the left of this booth [**39**] and then a set of interconnected rooms down the right hand south side [**31, 34, 37**]. You cannot know much about its activities.

As I watch, she disappears, seemingly slipping right out of the building as she enters the doctor's consulting room.

I imagine her explaining to the doctor, as many women had done: 'My menses had not come for the second month, so while he was out I boiled the cannula and began to do what she had advised. I do not know why I did it there at his studio. I heard the clock strike 1. I squatted over the toilet and introduced my left finger into my vagina. Having found the cervix, I pushed the cannula into it, with gritted teeth. It hurt and I worried about the position but nothing prepared me for what followed. I attached the other end of the cannula to the little glass syringe which contained boiled water, and pressed the plunger. There was the most sudden and violent pain in my abdomen and I fell to the side immediately in shock.[*] Then I went home in agony and waited.'

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[*] This description is adapted from a similar one found in Edward Shorter, *Women's Bodies: A Social History of Women's Encounter with Health, Ill-Health and Medicine* (London: Transaction, 1991), 201.

This morning, early, the air thickened to silent stillness as the sun moved around the back wall. I was coming out of the doctor's consultation room, bucket in hand. The doctor descended from his study. The light narrow stair sprang and squealed at his step; the electric light in the lobby cast bouncing criss-crossed shadows onto the wall. Before entering the consulting room he stepped forward and glanced up. Mme Dalsace was there; waiting, looking down as silent witness to his morality. The house is as light as he could ever have wished, yet the surgery is flattened by the weight of domesticity above.

I thought I caught a faint smile on her face. I do not know the expression on his, or I cannot remember, but he turned promptly away withdrawing into the room behind, sliding the door behind him. I looked up again but Mme was no longer there. I continued to the waiting room to check the maid had cleaned it properly.

My laundry window overlooks the salon. I know I cannot be easily seen if I stand in the right place as I have made checks when cleaning the salon. When the front door bell rings, whether I am up or downstairs, I look out of one of the small windows facing onto the courtyard and let either patient, friend or workman in. I know which it is going to be from the different sounds of the bells. I also know exactly who is in the house at all times and can bring the correct refreshments or organise the cleaning and laundry to suit. Sometimes the things I collect from the clinic are very difficult to get clean.

SURGERY [37]

The room is discreet. You might be surprised at how the free-plan can hide yet hint at these functions within the domestic nature of the rest of the house. Yet, right on the front of the building, the lenses, with a layer of dust to their concavities, form the thinnest of skins to the courtyard.

I cannot see, but think she will be directed into the surgery to lie on the table. The sheet is cold.

'The thing came closer. With its metal spatulas pressed together it looked like a bizarre revolver, like a duck's beak without the two pretty holes. I stretched my head up … The

two cutting tongues penetrated and obstructed me. A tear rolled down my cheek. A long thing that I could hardly feel advanced down my metal walls.*†

Me, my, her; now or then? I will tell you: it's a case of teasing out the story. To try to enter the glass, with a look, a desire, is to be castrated. It is a feminisation of the gaze, where the self, its image, its objects, rather than bouncing back to reaffirm identity, is absorbed. The glass opposes memory, with its restless depth. Even once she had gone inside she could not have really entered. She is merely on the other side looking from behind. Ingenious ruse: it meant she wasn't quite present, the illegality of the aborting therefore repressed; secrecy maintained.

She knows whether the surgery has been used as she cleans it at the beginning and end of each day. The table, with its orange rubber, is positioned just in front of and rectilinear to the glass plane. She stretches a new white sheet over it. The operation will take place behind a thin layer of glass to the public face of the building. The patient will be turned inside out, projected from the inside of the building to the outside, fragmented by the multitude of murky lenses, whilst having her insides viewed and removed. This floating and projecting is the denouement of the sequence of gynaecological spaces. Knowing it is there, just beyond the thin but refracting layer of lenses, exposes the secrecy of the clinic.

I lie on the table startled to realise where I am. The emptying out of my womb, a denial of consummation, will take place contained by a thin layer of glass almost on view to the outside. My shame is magnified as I imagine him standing by the front door I entered myself a little while ago. I can see my body as he does – shards of light and shadow in the medical light, like an x-ray caught on glass.

I have a special mixture for the blood on the linens I collect from there. A paste of vinegar and *levure chimique* from the pharmacy. After soaking the cloths in cold water, I apply to stubborn marks and rub until white again. This mixture is also good for the floor.

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† Leduc, *Ravages* (1969), 394.

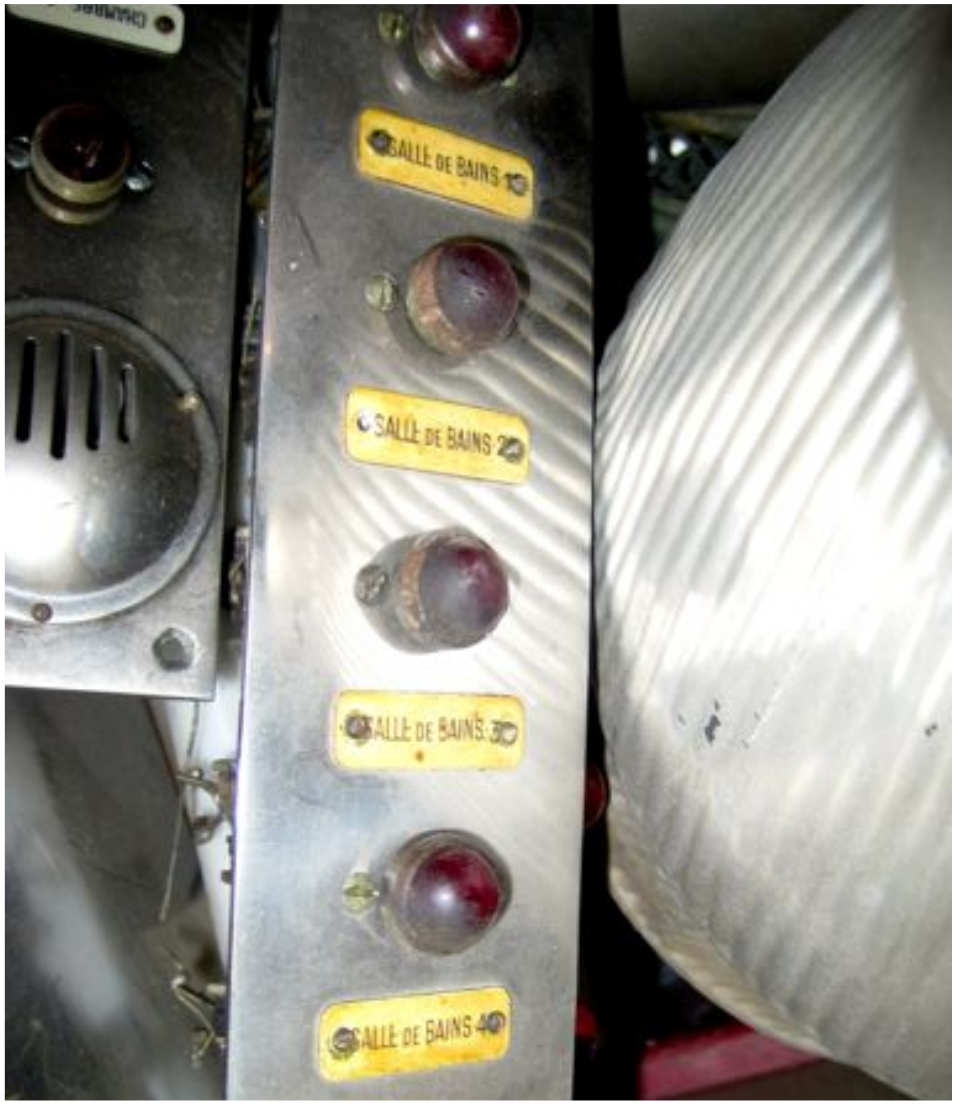
I asked to see in the cellar **[54]**. *Ah, I thought, I may find something of the patient archive, the lists of their operations. Proof of the events that took place here.*

I had never entered the basement before. It was dark. I saw myself coming across things: the medical tools and devices I had once seen in the Dr's clinic in the 1930s. All I found were crates of wine, an old filing cabinet and dust [Plate 116].

Once I watched a man stand outside the lensed wall **[25]**, **[17]**, staring for a long time, nose pressed against, peering through the gridded glass. Could he see the female body, lying down, receding? A bride floating horizontally away? He would not be able to quite make out the contours. Just standing, looking makes him measure his own body: stiff, solid. His hand touches the glass leaving the prints of his fingers.

Later, when I enter this room again, the now abandoned surgery, layers of dust shift. I am moved, unable to think. The thin, brittle glass appears a contradiction, soft and pulpy, like jelly or thick like sea water. You are neither inside nor out. The trick of the glass was to remove the patient from the interior, and her interior life, and allow her to imagine herself from the outside, returning to the life she desires to live. The room is perplexing, beguiling and repellent at the same time; I want to stay in it forever and cannot wait to leave.

Plate 116: Lighting panel alerting the housekeeper to attend different rooms in the house. Found discarded in basement, November 2010.



Mary Reynolds / Dust Jackets

As I have argued, Annie Dalsace holds an important position in the *Maison de Verre*. From her winter garden she partially monitors the clinic, appearing to both promote and moderate its role. Her support arguably contributed to the potential of the *femme moderne*. One such woman was Mary Louise Reynolds [1891-1950] [figure 5.29].[137]

This section does two things. It establishes Reynolds as a possible connection between Marcel Duchamp and the *Maison de Verre*, and, further, introduces the artist's book as a connective between the house, the *Large Glass*, Mary Reynolds and modernity.

It seems possible that Reynolds and the Dalsaces were acquainted, friends even. In the fictional 'Motes', I imply that Reynolds is a patient visiting the *Maison de Verre*, surprised by aspects of the hidden clinic. She is seen by the housekeeper, who imagines her route around the ground floor of the building. I have no definitive proof, yet my research shows that the spheres of influence exerted by the Dalsaces through the *Maison de Verre* overlap with those of Reynolds and Duchamp. The Dalsaces held a traditional weekly 'Salon' for the avant-garde and political left. Reynolds was popular and gregarious, and can be connected to many French and American artists and writers.[138] At her home, at 14

Figure 5.29: Man Ray, Mary Reynolds, c. 1935.

[137] Research on Reynolds is from Susan Glover Godlewski, 'Warm Ashes: The Life and Career of Mary Reynolds', at http://www.artic.edu/reynolds/essays/godlewski.php (2001); Tomkins, *Duchamp* (1997), 258–9; See also an extended version of the essay, in French, Susan L. Glover, 'Cendres chaudes: vie et carrière de Mary Reynolds', and other essays in *Étant donné no 8* (Paris: Association pour l'Étude de Marcel Duchamp, 2007).

[138] As Duchamp wrote in his manuscript for her posthumous catalogue *Surrealism and Its Affinities: The Mary Reynolds Collection* (1946), 'From the time she made her home in Paris in the early 20ies Mary Reynolds took part in the literary and artistic life which was resurrected in France after having been dormant for the four years of the First World War.' See *Étant donné no 8* (2007), 94.

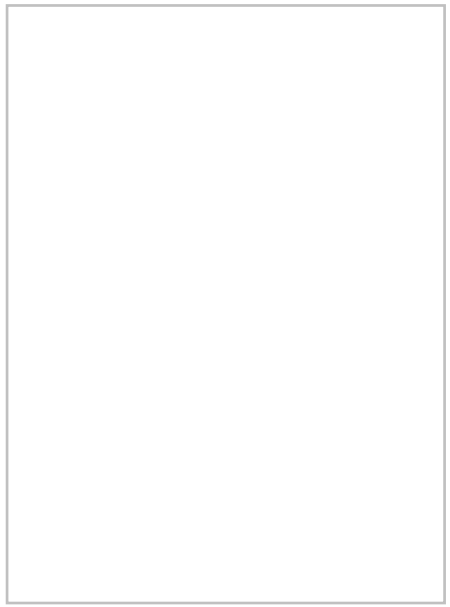


Figure 5.30: Paul Poiret, Paris 1928, PAN Annuaire du Luxe à Paris.

rue Hallé, it is said she kept an 'open house and many evenings were spent sitting around in the garden with others.'[139] These were 'Duchamp, Brancusi, Man Ray, Breton, [Djuna] Barnes, [Peggy] Guggenheim, Éluard, Mina Loy, James Joyce, Jean Cocteau, Samuel Beckett'.[140] She was also close friends with Kay Boyle, Raymond Queneau, Alexander Calder, Joan Miró and Jacques Villon.[141] The two social sets had many friends and acquaintances in common, for example Louis Aragon, Paul Éluard, Jean Cocteau, Joan Miró, Jeanne Bucher, Julien Levy and Walter Benjamin, and given the small size and intermingling of Parisian intellectual circles it seems possible they knew each other [Plate 117]. There may be further circumstantial evidence to the idea, which I now expand upon.

The Doctor

I start with the least likely connection, which I include as it seemed the most compelling to begin with. Man Ray, a friend of Reynolds and Duchamp, in his autobiography gives anecdotes on many of the protagonists above as friends and acquaintances. He tells a long story of a doctor named only Dr D—, who 'was a bit of a Surrealist himself, having attended some of the reunions and treated members in his capacity as a doctor.'[142] Dr D— was couturier Paul Poiret's physician whom Man Ray had worked for as a photographer in the 1920s until Poiret's bankruptcy in 1929 [figure 5.30]. Some time after Poiret had gone into decline he

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[139] Man Ray, *Self Portrait* (1963), 238.

[140] Godlewski, 'Warm Ashes' (2001), 12.

[141] *Étant donné no 8* (2007), 94. Henri Pierre Roché, Duchamp's closest friend, described her as '"calm", "noble" and a "handsome spectacle"'. *Étant donné no 8* (2007), 153. Also see Man Ray's description: 'tall, slender and distinguished-looking', Man Ray, *Self Portrait* (1963), 236.

[142] Man Ray, *Self Portrait* (1963), 137.

wanted his photograph taken. On several occasions Man Ray visited, with Dr D—, but for various reasons failed to take the photograph. Around the same time, though, he took some photographs of Dr D— dressed like Poiret, who had had the same beard and appearance. The prints were filed away. Upon Poiret's death in 1944 Man Ray, embarrassed not to have a recent photograph of him, sent those of Dr D— instead to an illustrated weekly newspaper, as a 'stand in'.[143] I have not been able to find Man Ray's photo of the doctor, nor are there any photos of Poiret in later life. There is though a photograph of the elderly Dalsace, slight and clean shaven. It seems unlikely he was Dr D— who, if like Poiret, was bearded and portly. Yet Poiret, the Dalsaces and Chareaus were also friends in the 1920s, and Madame Dalsace's draped style of dress as illustrated in her Lurçat portrait is very much of Poiret's design style [figure 5.31].[144]

Childbearing

Mary Reynolds' life is irrevocably connected to that of Marcel Duchamp. American, she had left New York to start a new life in Paris in 1920, devastated by the loss of her husband to influenza at the end of the war. She went on to be one of the few Americans who made Paris their permanent home.[145] She first met

[143] Man Ray, *Self Portrait* (1963), 132–8. When Poiret died penniless he had been rather forgotten. See also Paul Poiret, *King of Fashion: The Autobiography of Paul Poiret* [1931], (trans.) Stephen Haden Guest (London: V + A, 2009).

[144] See Vellay, *La Maison de Verre* (2007), 146, 148. Poiret and Chareau were great friends in the 20s, see letter from Nathalie Dombre to Marc Vellay, December 1980, in Vellay and Frampton (eds.), *Pierre Chareau* (1985), 22.

[145] Tomkins, *Duchamp* (1997), 258–9, 292. Loyal to the city, she played an important and dangerous role in the French resistance during the Second World War, (she was arguably more committed to her adopted city than Duchamp, who returned permanently to New York in 1942).

Figure 5.31: Jean Lurçat, *Annie Dalsace*, 1922.

Duchamp in New York in 1920.[146] When he returned to Paris in 1923, he was soon reintroduced to her, and they began a covert relationship which Duchamp undertook great pains to keep secret.[147] After his disastrous and unexpected marriage to Lydie Sarazin-Levassor in 1927, which had deeply distressed Reynolds, Duchamp seemed to mellow. By 1931, their relationship become not only public but more secure. He later described it as 'a true liaison, over many, many years, and very agreeable'.[148] Although the couple lived separately, Duchamp maintaining his apartment at 11 rue Larrey, they were by now, openly a couple.[149]

Like many women of her class and education Reynolds never had any children. Of course, she may have been infertile but given that Duchamp explicitly rejected what he called 'trappings' it would have been inconceivable for her to have borne a child. There is no reference to childbearing in any literature on Reynolds, and her work gives no clues. Given Duchamp's position, and perhaps her own, I surmise she may have sought contraceptive or abortive advice. William A. Camfield speculates in a similar way on Duchamp's artist sister Suzanne.[150] She married Dada painter Jean Crotti, a devout catholic and almost certainly anti-abortion, yet the couple had no children. Camfield points out that this is interest-

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[146] Frederick Kiesler, 'Interview with Marcel Duchamp', at http://www.toutfait.com/issues/volume2/issue_5/collections/kiesler/popup_p5.html (April 2003), 5.

[147] 'Duchamp cherished his freedom and his unconventional, even shocking, life. He insisted that their relationship be kept secret. If they ran into each other in public, Reynolds was not to acknowledge him. Duchamp continued to see others and expected her to do the same'. Godlewski, 'Warm Ashes', 4.

[148] Cabanne, *Dialogues with Marcel Duchamp* (1987), 68.

[149] Godlewski, 'Warm Ashes', 5.

[150] William A. Camfield, 'Suzanne Duchamp and Dada in Paris', in Naomi Sawelson-Gorse (ed.), *Women in Dada* (Cambridge: MIT Press, 1998), 82–103.

ing in the light of Suzanne's own work *Give me the right right to life*, 1919, and Crotti's earlier piece, a glass fronted box, *Solution de Continuité* (date unknown, perhaps 1916, or 1919), inscribed with 'Solution de Continuité / Wrong'. The words *solution de continuité* mean abortion.[151] As Camfield says, 'Suzanne's position seems clear enough in her self-portrait. With anti-bourgeois values worthy of a dadaist she claims *her* right to decide in the form of the scissors, poised to cut the cord of a hanging lamp, and in the title, largely inscribed around the scissors.'[152]

The American writers Kay Boyle and Djuna Barnes are just two examples of women who had experienced abortion and refer to it in their writings.[153] Phillip Herring writes, 'In June 1933, when Barnes found that she was pregnant in Tangier, it was [Nathalie] Barney she asked to wire her money so that she could return to Paris for an abortion.'[154] The abortion, performed by her friend Dan Mahoney, cost sixteen hundred francs, and led to a convalescence 'in a Paris hospital'. Mahoney, though not a doctor, 'sometimes earned money as a *faiseur d'anges*.'[155] Kay Boyle, Reynolds' closest friend, found she was pregnant in 1928

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[151] Camfield, 'Suzanne Duchamp and Dada in Paris' (1998), 101.

[152] Camfield, 'Suzanne Duchamp and Dada in Paris' (1998), 91.

[153] See Djuna Barnes, *Nightwood* [1936] (London: Faber and Faber, 2007); and Boyle, *My Next Bride* (1986).

[154] Philip Herring, *Djuna: The Life and Work of Djuna Barnes* (London: Viking, 1995), 151, 184. Barnes lived at 173 boulevard Saint-Germain in the twenties not far from the Dalsaces apartment at 195. Mina Loy lived in the same building as Barnes. Herring, *Djuna* (1995), 132, 144. Reynolds was close friends with both women.

[155] Herring, *Djuna* (1995), 184. A *faiseuse d'anges*, a term from the turn of the century was a non-medical (usually) woman who helped another terminate pregnancy. It is an ambiguous term, usually a 'back street abortionist', yet sometimes a 'wet nurse' Mahoney seems to have regularly performed abortions, mostly for prostitutes, as well as other medical procedures. Herring, *Djuna* (1995), 210.

Figure 5.32: Pierre Chareau, *Maison de Verre*, detail of bookshelves in salon. From Dominique Vellay, *La Maison de Verre: Pierre Chareau's Modernist Masterpiece* (London: Thames & Hudson, 2007), 45. Photographer François Halard.

and decided to abort. She wrote that, 'Caresse helped me find the place and time, and Harry … paid the enormous bill.'[156] Boyle gives no further details. It is highly unlikely that the American Hospital in Neuilly sur Seine, (set up in 1906, and tiny until 1926), would have performed the procedure, given its illegality both in France and America. It seems more likely that, as for most women, French and American, a *sages femme* (midwife) willing to take a risk would have been procured to 'start' an abortion as described in 'Background'. If lucky, the woman would present herself to a doctor to complete the termination legally. Such a doctor, with his sympathetic credentials, interest in birth control and discreetness of his clinic, could have been Dr Dalsace. In 1933, when my fictional 'Motes' is set, Reynolds would have been forty-two, possibly still fertile. Did Reynolds seek advice or intervention from Dr Dalsace?

Binding

Mary Reynolds, with a private income from her parents in America, and without the 'shackles' of children, sustained a career as a bookbinder. Although there is no specific evidence that Annie Dalsace supported women's art in particular, she was a collector of avant-garde art and literature, and artists' handmade or bound books [figure 5.32].[157] The avant-garde practice of *reliure*, bookbinding, was pioneered by bookbinder and furniture designer Pierre Legrain [1889–1929]. Le-

[156] Robert McAlmon and Kay Boyle, *Being Geniuses Together 1920–30* (London: Hogarth Press, 1984), 320. Caresse and Harold Crosby were her friends and publishers. Actually, Boyle had six children in all. Her commitment to family life is speculated by some as contributing to her uneven reputation as a writer. See Sandra Whipple Spanier, *Kay Boyle: Artist and Activist* (Edwardsville: Southern Illinois University Press, 1986), 216. Feminist writer and activist Madeline Pelletier notes that abortions could cost as much as two hundred francs, see Madeline Pelletier, *Le Droit d'avortement* (Paris, 1913), 9.

[157] Vellay, *La Maison de Verre* (2007), 42, 11.

grain's bookbinding set out to reinterpret the written or visual context of the book through its cover and binding, combining craftsmanship and artistic innovation. Influenced by Surrealism and De Stijl he used the same leather inlay techniques of the Louis XIV period ornate bindings of the nineteenth century, simplifying and departing from them in style [figures 5.33].[158]

A craft taken up by some women at the time, Alaistair Duncan and Georges de Bartha state that: 'early in the 1920s, perhaps attracted by the fresh image Legrain had given to bookbinding, many women were drawn to the medium. Among these were widows of binders killed in the war and an enterprising generation of young women in search of a fashionable vocation in the arts at a time when many professions were closed to them.'[159] Women binders of the period trained by Legrain include Mary Reynolds, Rose Adler, and Geneviève de Léotard.[160] They created covers for usually male writers in highly original ways, combining material, narrative content, and graphics. Bookbinding, though, an art collected by the wealthy, reached a peak in the 1920s and 30s. By the Second World War, partly due to the depression and partly due to altering manufacturing techniques which challenged the status of the book as a collectors' item, it had gone into decline. Covers became mass produced, used more basic materials, employing graphic rather than complex leather tooling crafted techniques.[161]

Figure 5.33: Pierre Legrain, from *Répertoire du Gout Moderne*, 1928–29. Smithsonian Institute Libraries.

[158] See Godlewski, 'Warm Ashes' (2001), 6.

[159] Alaistair Duncan and Georges de Bartha, *Reliures de femmes de 1900 à nos jours* (Paris: Librairie Jean-Claude Vrain, 1995), 20.

[160] Yves Peyré and H. George Fletcher, *Art Deco Bookbindings: The Work of Pierre Legrain and Rose Adler* (New York: Princeton Architectural Press, 2004).

[161] Alaistair Duncan and Georges de Bartha, *Art Nouveau and Art Deco Bookbinding, the French Masterpieces 1880–1940* (1989), 21–24.

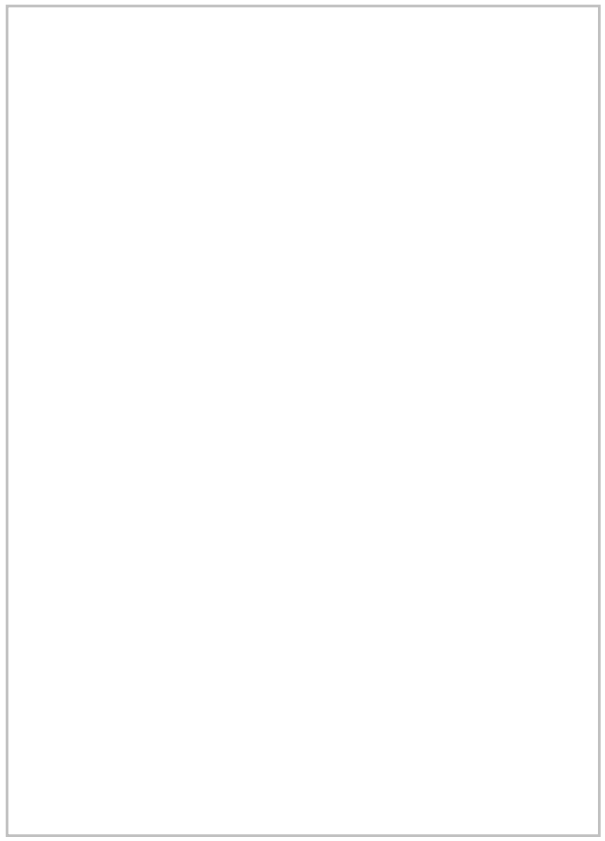

Figure 5.34: Mary Reynolds, binding for Alfred Jarry, *Ubu Roi*,1921; and Jean-Pierre Brisset, *Le Science de dieu*,1900. Mary Reynolds Collection, Chicago.

Reynolds was trained by Legrain in the late 1920s until his sudden death in 1929.[162] She bound over sixty volumes [figure 5.34], creating designs for Alfred Jarry, Raymond Queneau, Jean Cocteau and Paul Éluard throughout the twenties and thirties, many of whom were friends of Duchamp.[163] Yet she is excluded from most studies on 1920s bookbinding.[164] Reynolds experimented with form and design in unique ways. Her style was idiosyncratic and used new materials with clever imagery, sometimes recalling Duchamp's puns.[165] Her bindings, though, were not always technically successfully. The unusual materials, sometimes papers or glues inappropriate to the medium, and lack of adherence to accepted formal technique, resulted in some of her bindings' deterioration. Perhaps it was this, combined with the changing status of the book, that caused Reynolds to stop

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[162] Godlewski, 'Warm Ashes', (2001). Bookbinders congregated on the left bank, around Saint- André-des-Arts, see Duncan and de Bartha, *Art Nouveau and Art Deco Bookbinding* (1989), 185, n. 1.

[163] See Hugh Edwards, *Surrealism & its Affinities: The Mary Reynolds Collection* [1956] (Chicago: The Art Institute of Chicago, 1973), 84–103, for a full selection of Reynolds bindings.

[164] None of the notable texts on women bookbinders mention Reynolds, something the Mary Reynolds Collection in Chicago has begun to address. See Duncan and de Bartha, *Art Nouveau and Art Deco Bookbinding* (1989), Marianne Tidcombe, *Women Bookbinders, 1880-1920* (London: The British Library Publishing, 1996), Gordon Norton Ray, *The Art Deco Book in France* (Bibliographical Society of the University of Virginia, 2005); Gordon N. Ray and G. Thomas Tanselle, 'The Art Deco Book in France: The 1985 Lyell Lectures', in *Studies in Bibliography*, Vol. 55 (2002), 1-131.

[165] It is unknown to what extent she collaborated with Duchamp on certain designs. He laid no claim to them after her death, and was instrumental in setting up a collection of her works in Chicago. This, along with her association with Surrealism rather than the art-deco, may have contributed to the exclusion of her work from studies on bookbinding. Glover states 'Duchamp lui-même attribuait le succès des reliures de Reynolds à l'esprit et au talent de celle-ci.' [Duchamp himself attributed the success of the bindings to Reynolds' spirit and talent]. See Glover, 'Cendres chaudes', in *Étant donné no 8* (2007), 29.

binding after the war.[166] Her work, peculiar and delicate, failed to make a lasting impact.

Reynolds bound first editions by French and English writers, often given to her as gifts.[167] She also accrued a large collection of others' books and artworks, now housed in Chicago.[168] The most interesting of her bindings was made in 1937. Man Ray had compiled a set of drawings for which Paul Éluard wrote poems, resulting in a jointly authored book, *Les mains libres* (*Free Hands*), 1937 [figure 5.35]. Reynolds' cover is a lesson in sensuality. Janine Mileaf, describing the cover, suggests touch combines with, replaces even, reading.[169] The book, bound in full tan morocco (goat hide), has a pair of unstitched, 'slit-open' kid gloves glued to each surface of the front and rear cover.[170] When opened, it is discovered that the book cover's inner surfaces, or *doublures* are made from a pink sponge rubber, as Duchamp's later breast, *Prière de toucher*, 1947, discussed in the last chapter. These are partly veiled by silk endpapers, 'like artificial rose petals.'[171] Mileaf suggests the book encapsulates a tactility through the 'caress' of the opened gloves on the book covers.[172] I have not touched the original book in the flesh myself so draw on Mileaf's description further: 'As one turns and

Figure 5.35: Mary Reynolds, binding for Man Ray and Paul Éluard, *Les mains libres, 1937*. Mary Reynolds Collection, Chicago.

[166] Also, many of the writers she bound for left France during the war.

[167] Man Ray, *Self Portrait* (1963), 238–9.

[168] See Edwards, *Surrealism & its Affinities* (1973).

[169] Mileaf, *Please Touch* (2010), 19.

[170] Edwards, *Surrealism & its Affinities* (1973), 102. With palladium leaf title names of artist and author on spine.

[171] Edwards, *Surrealism & its Affinities* (1973), 102.

[172] Mileaf, *Please Touch* (2010), 19–20, 215.

depresses each page into its [softness of interior] cover, the resiliency turns reading into a tactile activity. Each time I pick up the book to hold it, I run the pads of my fingers along the seams of the unstitched gloves. I take up the position of the absent hands – the hands of the artist, those of the former owner of the gloves, another reader.'[173]

Importantly, the binding to *Les mains libres* seems to reflect a more explicit sexuality between genders, a sense of the liberality of the times. A further reading I make is to understand the book cover as layers of skin, enclosing the body of text. *Libres* is a homophone of *livres*, playing with the idea of 'free hand' and 'handled or touched book'. The gloves offer a female skin to the reader's hand, who touches it in order to undress the book by opening its outer skin. Opening reveals the body of a women, as the soft pink skin of the *doublures*. Veiled by the silk endpapers, the hint of the breast lies hidden within the silk clothing. Further turning of pages reveals the interior body of the (male) text. Moreover, this stripping or opening of the book opens the reader's body at the same time. Opening the book covers requires the literal opening of the body, as the two hands move apart. As, I open the book (in my imagination), folding the covers back, my hands clothed by a[nother] woman's gloves, my own body is split open. I reveal my chest at the same time as I reveal the spongy body of the book. I imagine that, as I hold the book, I could not then help but touch, caress even, both the skin of the hand, and the spongy breast inside. In Reynolds' hands the male book and the reader become stripped and regendered in a shuttling *pas de deux*. The reader and book undress each other.

Reynolds' use of animal skin, particularly vellum or parchment, in some of her works, is thought to have influenced Duchamp's later use of the material in

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[173] Mileaf, *Please Touch* (2010), 19.

Étant donnés, 1946–66.[174] More explicitly, around 1946 Duchamp made a small study of the figure of *Étant donnés* using parchment as the skin to the female body. In scale and form it resembles a book cover [figure 5.36]. The figure nestles in the layers of the surrounding material, at the scale of the hand. Her legs are splayed as the nude in the final ensemble, yet her pose strikes me as less sensual than Reynolds' *Les mains libres*, revealing all in an almost gynaecological way.

The relations in these two works, between opening, viewing and touching the book and body as object and subject recalls the movement of a patient around the ground floor of the *Maison de Verre*. Her circulation into the house, to the waiting room, and then into the examination and surgery rooms leads to her being watched, unclothed, made horizontal, opened, looked into and analysed. She goes through this performance not for her general health alone but to maintain her found or recovered sexual pleasure. It is this thinking that inspires the final project of this chapter, 'Dust Jackets'.

Shop

In a final connection between the Dalsaces and Reynolds, art collector and publisher Jeanne Bucher, ran a gallery and bookshop adjacent to Pierre Chareau's *Boutique* shop until 1932 [figure 5.37].[175] *Les mains libre* was published by Bucher in 1937, in an edition of 675. The copy bound by Reynolds is signed *à Mary*

Figure 5.36: Marcel Duchamp, vellum study for *Étant donnés: 1° la chute d'eau, 2° le gaz d'éclairage*. c. 1946-48. Moderna Museet, Stockholm.

[174] Taylor, *Marcel Duchamp* (2009), 76. Vellum is a thin highest quality specially treated untanned leather from calf skin. Parchment is made from calf, goat or sheep skin. http://hq.abaa.org/books/antiquarian/abaapages/glossary.html.

[175] She was forced to close due to the economic situation. She reopened a shop in 1936 at 9 boulevard du Montparnasse. See Jean-François Jaeger, *Nouveau dictionnaire de biographie alsacienne*, vol. 43, 4520; Lehni Derouet, *Jeanne Bucher: une galerie d'avant-garde 1925-1946* (Paris: Flammarion, 1994), 11.

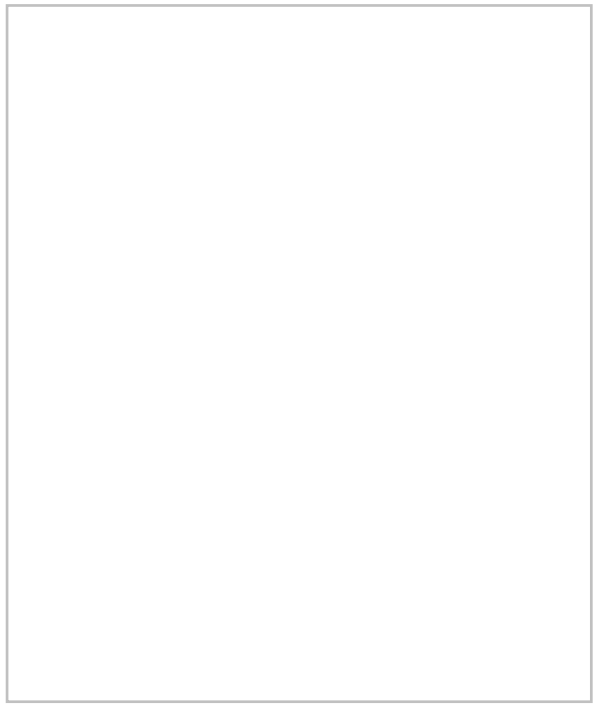


Figure 5.37: Pierre Chareau, *Boutique* and Jeanne Bucher, *Galerie Jeanne Bucher* at 3 and 5 rue du Cherche-Midi, 1932. From Lehni Derouet, *Jeanne Bucher: une galerie d'avant-garde 1925-1946* (Paris: Flammarion, 1994), 16, 17.

Reynolds / affectionately / Man Ray / Dec. 24 1937 / Paul Éluard. Jeanne Bucher, as Éluard, was a friend of the Dalsaces through the Chareaus and knew Max Ernst, Jacques Doucet, Rose Adler, and Reynolds. Adler was also a close friend of Dollie Chareau.[176] As Annie Dalsace collected both art and first edition books it seems very likely that she and Reynolds could have came together through Bucher.

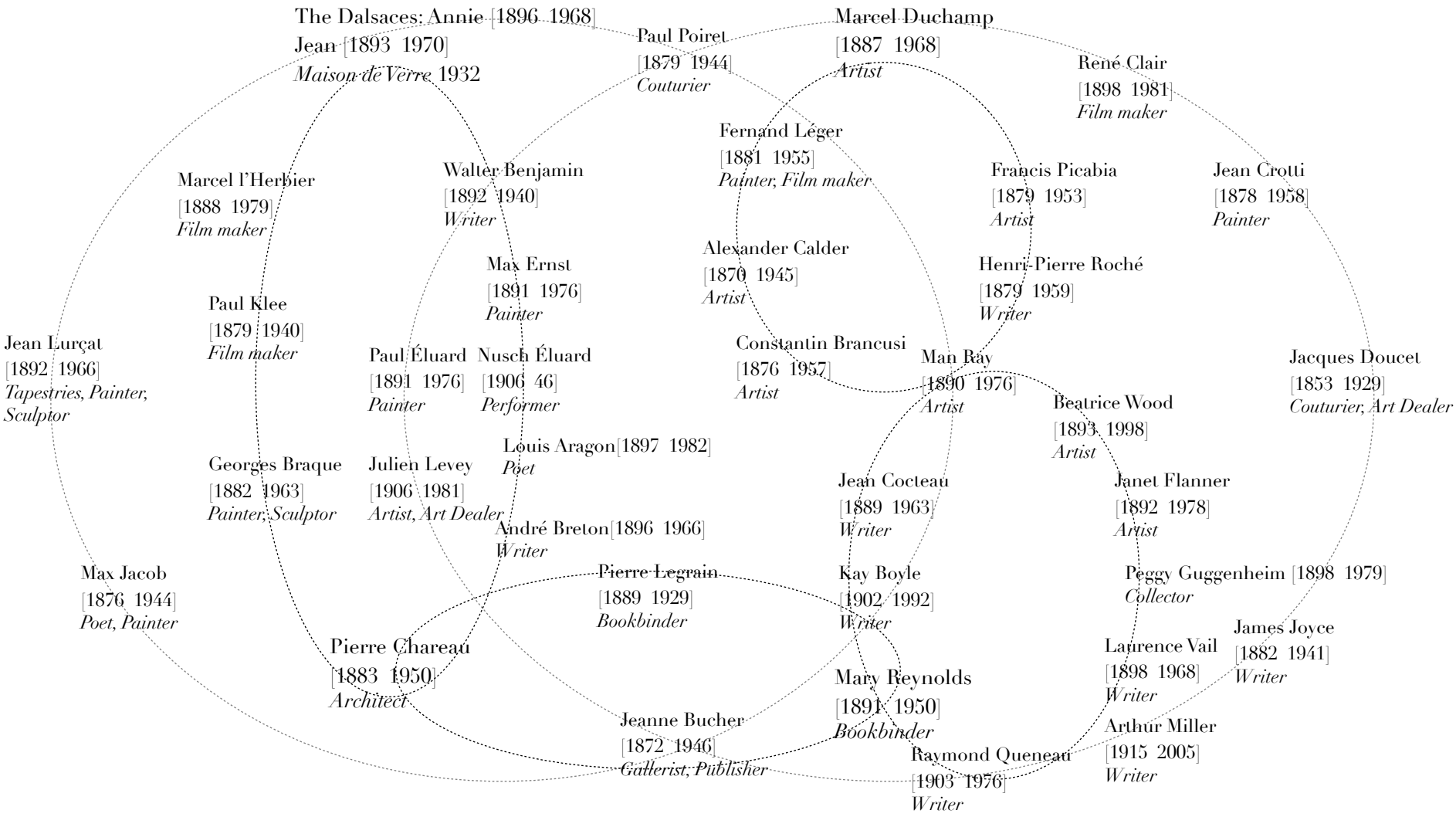
The *Maison de Verre*, located in Saint-Germain-des-Prés, was at the centre of left bank life geographically, culturally and temporally. As Nicholas Hewitt writes, the area was defined by 'its importance as a centre of left-wing, committed, intellectual culture throughout the inter-war years and the immediate post-war period.'[177] My diagram of narrative circles, attests to the possible intersections of the described lives [Plate 116]. At best, I create a constellation of possible links and interactions that have become dust through their marginal importance to each particular history. In the end Man Ray never explains who Dr D—is, nor tells us much more about Mary Reynolds. They were simply not that important to him. Histories of the *Maison de Verre* have not found it important to record who visited the clinic, nor the Dalsaces wider social connections. At worst then, my supposition remains just that, chasing its tale. Unproven. The records either do not exist or cannot be found. History remains nameless dust. And the final poignancy? After a period beset with illnesses, Mary Reynolds died in 1950, unexpectedly and quickly, of a late diagnosed uterine cancer.[178]

[176] See Derouet, *Jeanne Bucher* (1994), 16, 117, 119, 124.

[177] Hewitt, 'Shifting Cultural Centres in Twentieth-century Paris'(1996), 43.

[178] Godlewski, 'Warm Ashes', 21–22.

Plate 117: Paris 1917–39, overlapping spheres of influence, 2010–12.



Dust Jackets

Dust Jackets

Six book covers clothing the *Maison de Verre.*

This project is both archival and creative. Carolyn Steedman notes that the pickings of dusty cotton and linen rags in the mid-nineteenth century were essential to the paper trade.[179] Paper was scarce and precious. Here, a series of books, sleeves and dust jackets were made which explore different papers, including a waxed type, cotton rags, linens, parchment and glassine, as materials parallel to the those of the clinic at the *Maison de Verre*. The marks are made by the dust processes of the photocopier or through cuts, absences in the paper. The jacket act as a skin, clothing or wall to the internal space of each book which in turn explores a different space in the building [Plates 118–120].

[179] Steedman, *Dust* (2001), 130–1. Before the import of wood pulp for paper making after 1865.

Plate 118: Dust jackets, 2012.

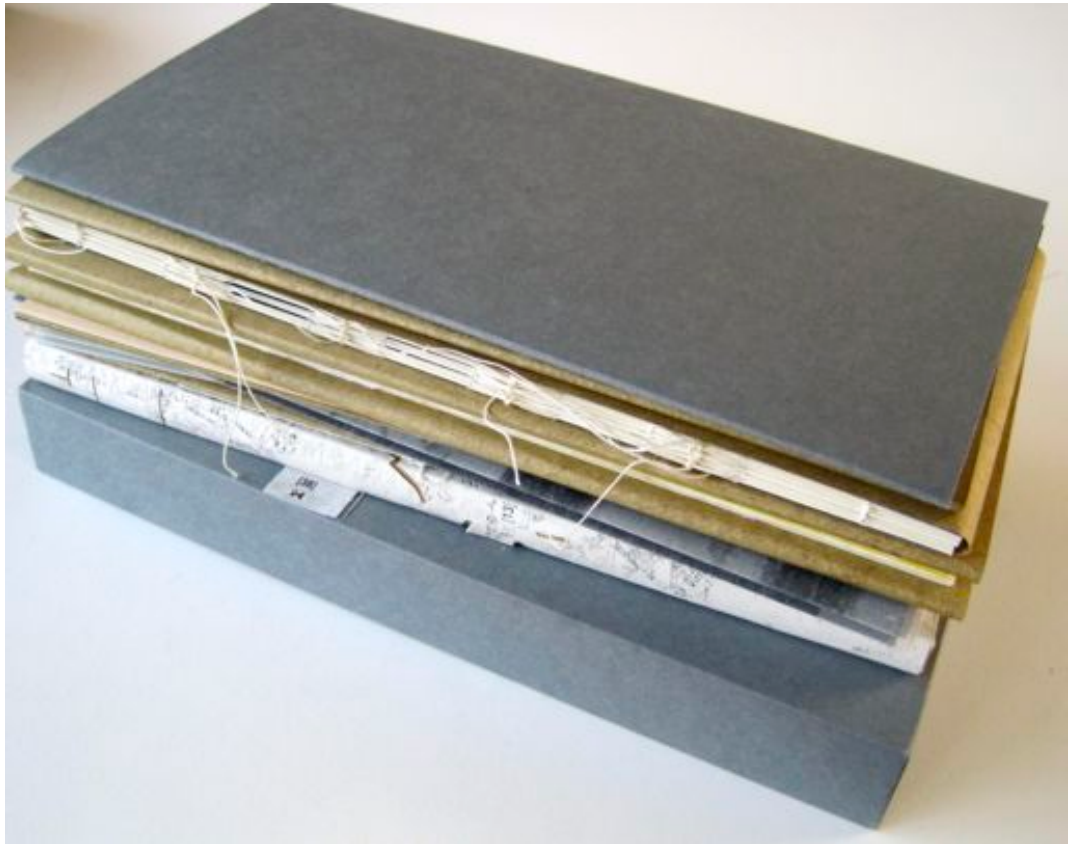
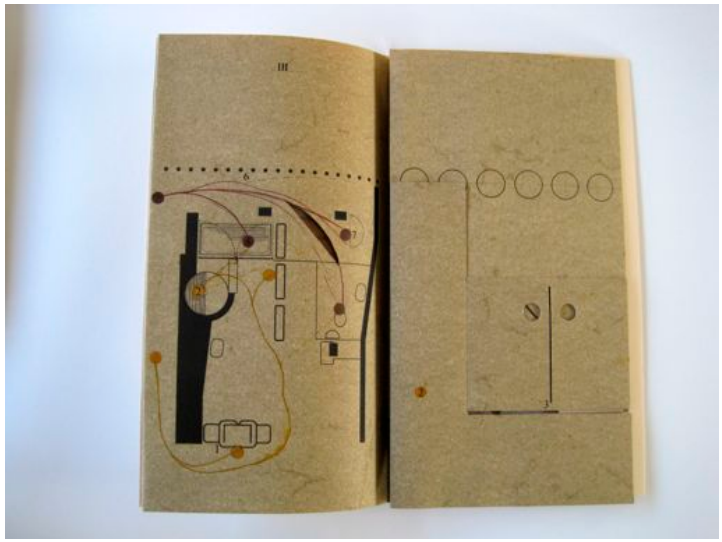
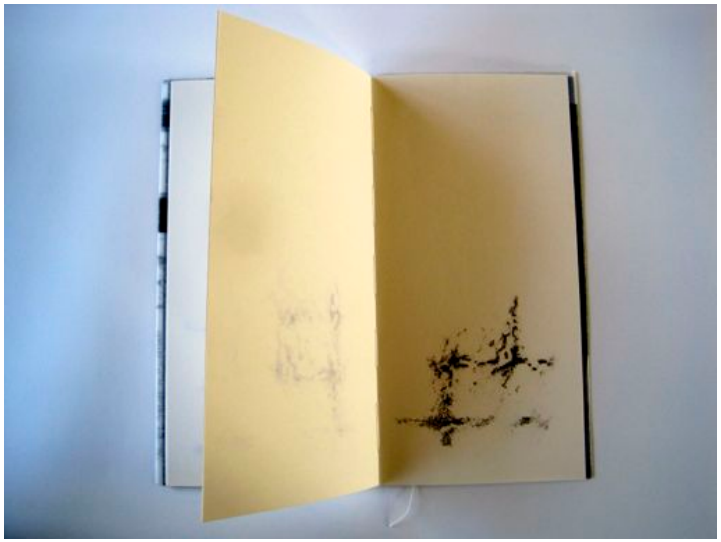
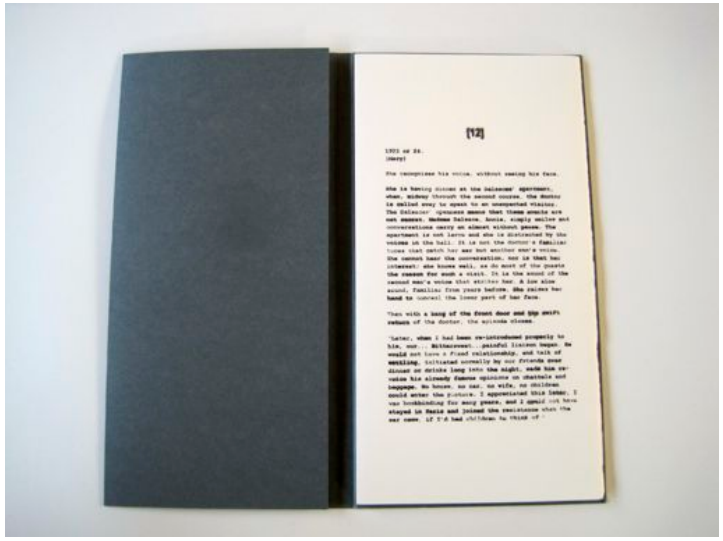


Plate 119: Dust jackets, 2012.







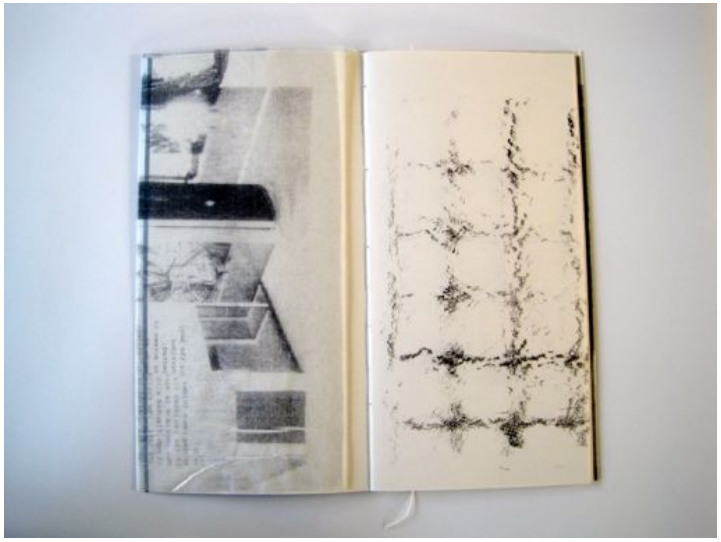
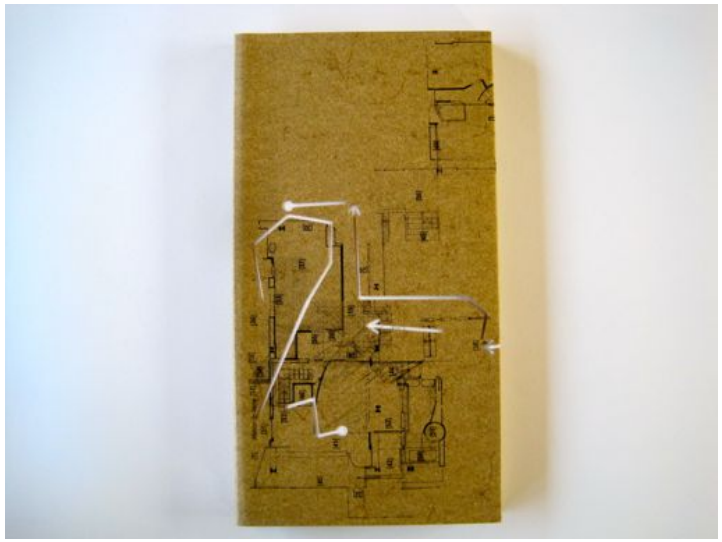
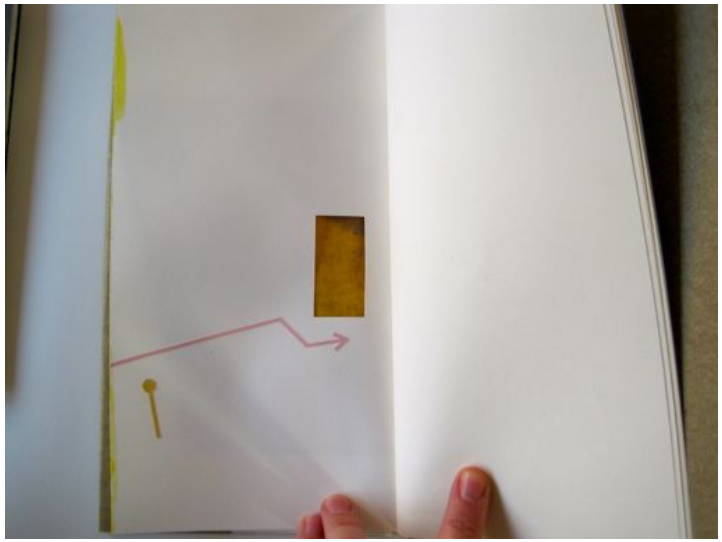


Plate 120: Dust jackets, 2012.





Dust Part-architecture

In my thesis, artists' books – both Reynolds' works and my own experiments – provide a connection between its parts. Duchamp's notes to the glass, collected together as loose sheets in various book type boxes – 'The Box of 1914', 'The Green Box', and 'A l'Infinitif' – associate the *Large Glass* with pieces of paper and pages of text as much as glass. If dust is the archive, a book in the past also traps dust, both literally and metaphorically. My discussion on Reynolds' *Les mains libres* shows the way a binding can be read as a story indicating not only a reading body but a sense of avant-garde spatial sexuality. Secondly, Reynolds' bookbinding practice provides a further connection between the protagonists – Chareau, Duchamp and the Dalsaces – and the *Maison de Verre*. As we have seen, she was taught by Legrain. Earlier, he had exhibited a collection of furniture designs titled *La réception et l'intimité d'un appartement moderne* with Chareau, and Paul Poiret, at the designers salon of 1924.[180] Reynolds and Duchamp possibly knew the Dalsaces, themselves book collectors, and the Chareaus, through many of their common friends and colleagues. The book, then, becomes a common object, passed from hand to hand, space to space.

[180] http://willy-huybrechts-gallery.com/artists/pierre-legrain/pierre-legrain-biograhy

6 Air

ATMOSPHERE

Air de Paris
Draughts
Ventilation and air circulation

CAST AIR

Infrathin and Irigaray
Fissure
Cast air

TRANSMISSION

Sounding
Mouthing
Air Part-architecture

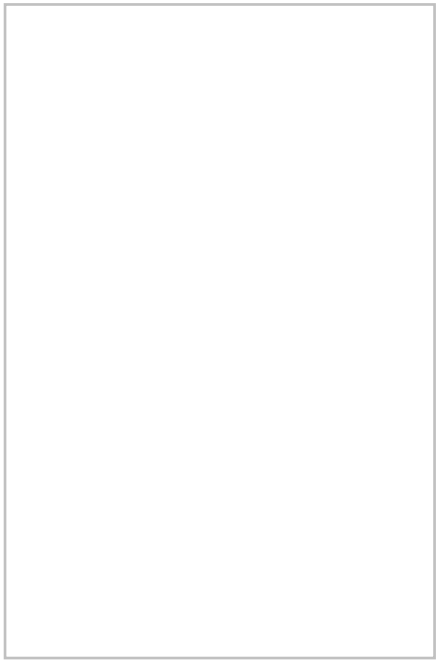


Figure 6.1: Marcel Duchamp, *Air de Paris*, 1919. Philadelphia Museum of Art. Photograph Emma Cheatle, 2010.

This chapter springs from the non-specular aspects of an architecture. Glass as a tangible form, was thought to appear immaterial and therefore successfully perceived as utopian. Dust and dirt, as well as reflection and translucency, betray the invisibility of glass. I argue, therefore, that air, truly invisible, is the true motif of modernity. An invisible necessity, air allows the transmission of sounds, smells, atmospheric conditions and tension through space.

The chapter is divided into three parts. 'Atmosphere' evaluates Paris as a historic environment seeking fresh air, and situates the *Large Glass* and the *Maison de Verre* as responses to its atmosphere. 'Cast Air' develops the idea that air is an invisible fluid cast or moulded by the solid materials around it. 'Transmission' describes air and the colour of material, as carriers of voice.[1] This culminates in a project of voices which seeks to recover and spatially represent conversations from the past. The listener is placed in an architecture slowly constructed from spoken words.

[1] Although colour seems specular, through Luce Irigaray I explore the relationship between sound and colour.

Air de Paris

The *Large Glass* and the *Maison de Verre* were, in part, responses to the particular atmosphere of Paris in the early twentieth century. Where the *Large Glass* was a reaction to the stultification of Paris during the First World War, the *Maison de Verre* was designed in the post-war context of modernity that reengaged with the values of light and air for physical health.[2]

Fresh air, unpopular into the nineteenth century, was by the turn of the twentieth century, firmly linked to good health.[3] Darkness and airlessness were associated with antiquity and dirt. Clearing the air was essential. As Rosemary Wakeman argues, 'Hygiene, aesthetics and circulation were the modernizer's chief tools for urban renewal.'[4] The wide boulevard was a key component of this modernisation, bringing air into the density of 'Old Paris'. In the 1820s Claude-Philibert Barthelot, the comte de Rambuteau, had campaigned for wider streets, as a solution to overcrowding, poverty and disease. His motto was 'water, air, shade.'[5] His early attempts, preserving old street typologies and public spaces,

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[2] Mary Lynn Stewart, *For Health and Beauty: Physical Culture for Frenchwomen, 1880s–1930s* (Baltimore, Maryland: John Hopkins University Press, 2001), 196, 149, 137, 140, citing Gustave Lagneau, *Du Surmenage intellectual et de la sedentarité dans les écoles* (Paris, 1886), 19–43; Roger Hyvert, *Conférences populaires d'hygiène pratique á l'usage des écoles normales, de enseignement secondaire classique* (Paris 1901), 54–56.

[3] See Alain Corbin, *The Foul and the Fragrant* (Cambridge: Berg, 1986), 215–216.

[4] Rosemary Wakeman, 'Nostalgic Modernism and the Invention of Paris in the Twentieth Century', in *French Historical Studies,* 27/1 (Winter 2004), 133.

[5] The boulevard type, unlike the street, consists of three routes: two pedestrian pavements of six to eights metres each and the roadway of twelve metres, with trees separating the three strands. See also Corbin, *The Foul and the Fragrant* (1986), 134.

were criticised, as existing housing blocks retained cramped and airless interiors. Napoleon III's approach in the 1860s, aided by Georges-Eugène Haussmann, was entirely new and cleared whole blocks along new boulevard routes, substantially opening up the urban fabric.[6]

Haussmann's city, as we have seen, had varied reception. Contemporary writers claimed: 'The new boulevards have introduced light and air into unwholesome districts, but have done so by wiping out, along their way, almost all the courtyards, and gardens'.[7] The traditional common courtyard was now often reduced to little more than 'a small forgotten space housing toilets, wells, fountains, garbage cans, sheds and various outbuildings.'[8] As Émile Zola described, staggered windows of differing sizes, depending on the room they lit, opened onto these tiny courtyards, across which servants oversaw each other and food was hung out. Light, air and privacy were scarce.[9] Many apartments in Haussmann's new blocks had deep plans with interior rooms with their own ventilation problems. Narrow air wells, no more than two metres wide, were introduced into the

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[6] François Loyer, *Paris Nineteenth Century Architecture and Urbanism*, (trans.) Charles Lynn Clark (New York: Abbeville, 1988), 112–124. See also David H. Pinkney, *Napoleon III and the Rebuilding of Paris* (New Jersey: Princeton, 1958); Marius Barroux, *Le Département de la Seine et la ville de Paris, notions générales et bibliographiques pour en étudier l'histoire* (Paris: Conseil Général de la Seine, 1910); Adolph Berty and H. Legrand, 'Topographie historique du Vieux Paris', in *Histoire générales de Paris*, 70 vols. (Paris: Bibliotèque Nationale, 1866–).

[7] Victor Fournel, *Paris nouveau et Paris futur* (Paris, 1868), 224.

[8] Loyer, *Paris Nineteenth Century Architecture and Urbanism* (1988), 126; André Morizet, *Du vieux Paris au Paris moderne. Haussmann et ses prédécesseurs* (Paris: Hachette, 1932).

[9] Émile Zola, *Pot Luck* (*Pot-bouille* [1883]), (trans.) Brian Nelson (Oxford: Oxford World Classics, 1999), a brilliant exposé of the apartment house in the late nineteenth century.

later buildings to gain extra light and air flow to the interior of the apartment [figure 6.2].[10]

The introduction to Haussmann's memoirs claimed: 'There were cries that he would bring on the plague; he tolerated such outcries and gave us instead – through his well-considered architectural breakthroughs – air, health, and life.'[11] It is undoubtable that such ideals brought vital changes to the structure of nineteenth century Paris, including sewers, water supplies, bridges and lighting, making the city open, lighter and more navigable.[12] Haussmann's thinking permeated architectural ideals of modernity well into the twentieth century. Even Walter Benjamin, whose distrust of Haussmann was established in the last chapter, wrote of the boulevards' 'widened sidewalks, electric light, ban on prostitution, and culture of the open air'.[13]

Draughts

The First World War, and the years leading up to it, stifled the new Parisian open air culture. One commentator remarked: 'we are strangely troubled by an un-

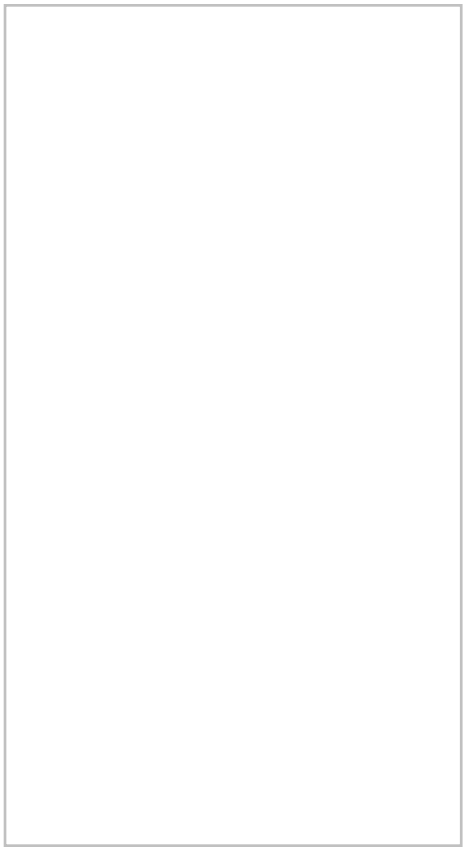

Figure 6.2: Jacques Fredet, *Les Maisons de Paris* (2003), Vol. II., Planche 115, Maison de la Cossonerie, Angle des rues de la Cossonerie et Saint-Denis. Architecte François Rolland, c. 1860s. Courtyard/airwells marked in yellow.

[10] Jacques Fredet, *Les Maisons de Paris: types courants de l'architecture mineure parisienne de la fin de l'époque médiévale à nos jours, avec l'anatomie de leur construction* (Paris: Éditions de L'Encyclopédie des Nuisances, 2003), Vol. II., Planches 109, 111, 113, 115.

[11] Georges-Eugène Haussmann, *Mémoires du Baron Haussmann*, vol. 2 (Paris, 1890), xi.

[12] David P. Jordan, 'Haussmann and Haussmannisation: The Legacy for Paris', in *French Historical Studies,* 27/1 (Winter 2004), 87–113; Pierre Pinon, *Paris: Biographie d'une capitale* (Paris, 1999); David van Zanten, *Building Paris* (Cambridge, 1994).

[13] Walter Benjamin, *The Arcades Project*, (trans.) Howard Eiland and Kevin McLaughlin, (ed.) Rolf Tiedmann (Harvard: Harvard University Press, 2002), [C2a,12], 88.

healthy close odour […] dare he confess that Paris is stuffy?'[14] The *Large Glass*, I argue, in part stemmed from Duchamp's reaction to the confining atmosphere. Duchamp, the young promenading bachelor, faced dark 'unlit streets and early shop closings'; 'Evening strolls are miserable now,' he said.[15] By 1915, his presence on the city streets rather than behind the lines was contentious for a young man.[16] His complex ruse to resist conscription found him the recipient of 'malicious remarks' and he was, on occasion, spat at in the street by strangers.[17] In June 1915 he left for New York stating: 'I do not go to New York but leave Paris.'[18]

Duchamp's feeling of confinement was emotional as well as public, associated with his self-proclaimed bachelor status. It may have been seeded as

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[14] Louis Veuillot, *Les Odeurs de Paris* (Paris, 1914), 8, ['nous sommes étrangement tourmentés d'une malsaine odeur de renfermé…oserait-il avouer que Paris sent le renfermé?']. He also says: 'les odeurs de Paris me poursuivaient, me persécutaient, m'insultaient' [the stink of Paris continues to persecute and insult me], 6.

[15] On Duchamp's feelings for Paris and his desire to leave see Calvin Tomkins, *Duchamp: A Biography* (London: Chatto and Windus, 1997), 140–2; Francis M. Naumann and Hector Obalk (eds.), *Affect/ Marcel: The Selected Correspondence of Marcel Duchamp,* (trans.) Jill Taylor (London: Thames and Hudson, 2000), 32.

[16] Duchamp claimed that a medical board had found him unfit to fight due to a heart murmur. Keiran Lyons has shown that he was more unwilling to fight than that suggests and, having earlier reduced his military service, he appealed against conscription. While the appeal was assessed, 'he was allowed to go to New York in 1915 and remained under military scrutiny until 1918.' Lyons continues: 'His military papers contain neither the evidence about his medical condition, nor the terms of his medical exemption. A 'heart murmur' or *'insufficences cardiaque'* is occasionally referred to in the Duchamp literature. Nevertheless, Duchamp's ready appropriation of the 'heart' as a metaphor for larger interconnecting systems suggests that the distress caused by this 'heart murmur' was perhaps not physiological.' See Keiran Lyons, 'Military Avoidance and the "Jura-Paris Road"', at http://www.tate.org.uk/research/tateresearch/tatepapers/06spring/lyons.htm, unpaginated. See also Naumann and Obalk (eds.), *Affect/ Marcel* (2000), 30, 36.

[17] Tomkins, *Duchamp* (1997), 140–2.

[18] Naumann and Obalk (eds.), *Affect/ Marcel* (2000), 36–37. Underlined in original.

early as 1911 when he discovered that his affair with Jeanne Serre (her 'fall') had led to the birth of a daughter, (Yvonne 'Yo' Sermayer [1911–2000]), a fact he never overtly acknowledged.[19] His paintings, *Virgin No. 1*, 1912, *The Passage from the Virgin to the Bride*, 1912 and *Bride*, 1912, all precursors to the *Large Glass*, were made just after this discovery. Around this time he also began writing notes to support the *Large Glass*.[20] Upon arrival in New York, the 1912 paintings were translated onto the upper plane of glass, the Bride's part of the construction. As we have seen in 'Glass', the Bride was a depiction of a virginal young girl caught in the 'gallows', to fulfil society's expectations through the act of marriage, with a 'maiden's attachment to her girl friends and relatives'.[21] She represented Duchamp's resistance to and release from the stifling expectations of Parisian bourgeois life.

During this first sojourn to New York, from 1915–23, Duchamp returned frequently to Paris.[22] Some of his work overtly related to Parisian air, as though drawn to the aspect of the life he was giving up. In 1919, after a Christmas visit to Rouen, he bought an ampoule containing serum from a pharmacy on the rue

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[19] Caroline Cros, *Marcel Duchamp,* (trans.) Vivian Rehberg (London: Reaktion Books, 2006), 109. Also an artist, Duchamp did meet her and arranged an exhibition of her work in New York in 1967, see Marcel Duchamp, *Duchamp du signe: écrits* (Paris: Flammarion, 1994), 251; Tomkins, *Duchamp* (1997).

[20] Marcel Duchamp, *Marcel Duchamp, Notes*, (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980), (unpaginated); Marcel Duchamp, 'The Green Box' [1914], (trans.) George Heard Hamilton, 'The Box of 1914' and 'A l'Infinitif' [1913–15], (trans) Cleve Gray, in Michel Sanouillet and Elmer Peterson (eds.), *The Writings of Marcel Duchamp* (New York: De Capo, 1973),12.

[21] Duchamp, 'The Green Box' (1973), 39.

[22] The terms of his immigration to New York between 1915–23 stipulated that he renew his visa in Paris every six months. He returned to live in Paris for nearly twenty years from 1923–42.

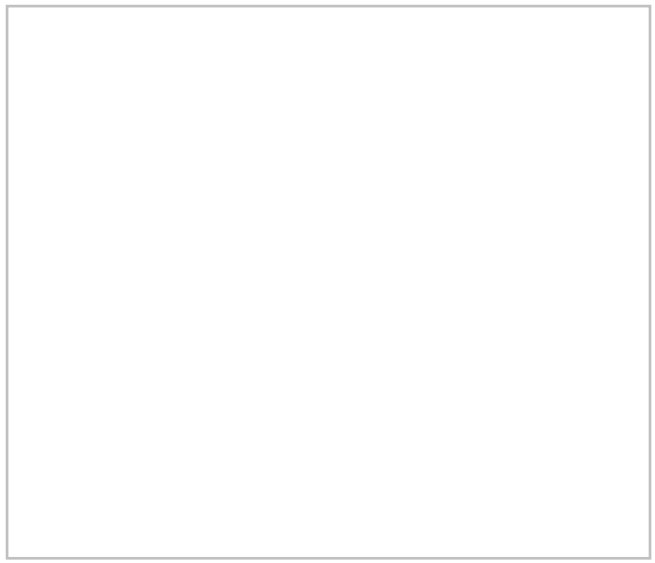

Figure 6.3: Marcel Duchamp, *Belle Haleine – Eau de Voilette* (*Beautiful Breath – Veil Water*), 1921. Original Rigaud bottle to left.

Blomet. Duchamp asked the pharmacist to break open the glass, remove the liquid and reseal it with a blowtorch. He returned to New York with his readymade, *Air de Paris*, 1919 [figure 6.1]. For some reviewers it was a kind of 'talisman'.[23] Its circular form the size of a hand, its brittle fragility making precious 50cc of Parisian atmosphere. This readymade preceded several more following the same theme. *Fresh Widow*, 1920, is a model of a French window with non-opening black leather panes where the glass should be – an absence of air for a husbandless bride. *Belle Haleine – Eau de Voilette* (*Beautiful Breath – Veil Water*), 1921, is the empty bottle of a popular perfume, *Un air embaumé* by Rigaud [figure 6.3]. The intended meaning of *Un air embaumé* is 'perfumed air'. *Embaumé* also means 'embalmed', perhaps the meaning Duchamp was interested in as he sought to preserve the scented past. The bottle's modified label shows Duchamp as Rrose Sélavy, his female alter ego who also appeared around this time [figure 6.4], photographed by Man Ray. The image used, placed on the greenish rather than pink bottle, was one of the more masculine of Rrose [cf. figure 5.2]. Duchamp seems to be suggesting the simultaneous presence of Bachelor and Bride, revealing a stifled kind of sexuality. A final 'printed Ready-made' in *New York Dada* begins: 'VENTILATION: On the question of ventilation opinions radically differ. It seems impossible to please all…'.[24] Air for Duchamp was the material of imagination which could go both ways, elusively fragile and potentially suffocating.

The ideas of the 1919–21 readymades, to capture or occlude breath, scent and air, underpin the *Large Glass* [figure 6.5]. By 1920, around the same

[23] See Tomkins, *Duchamp (*1997), 222–3; Cros, *Marcel Duchamp* (2006), 60–1.

[24] See Marcel Duchamp and Man Ray (eds.), *New York Dada* (April 1921), in Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973),179.

time *Fresh Widow* was made, Duchamp had completed the Bride part and began working on the Bachelor panel. His narrative, invisible on the *Large Glass*, but clear in the notes, describes the communication between Bachelors below to the Bride above as a circulation of gas. Each guise of the Bachelor – nine characters ranging from Gendarme to Gravedigger'[25] – is a mould for forming or casting an Illuminating Gas. Once created, this passes along narrow rods under pressure, turning to liquid before the rods shatter. The liquid is released as 'unequal *spangles lighter than air* (retail fog).'[26] This is filtered through the Sieves until 'dizzy', and, 'what a drip!', only reaches the Bride due to a Ventilator which 'forces the gas to attach itself' to the interior of the Bride.[27] Describing the Bride as an 'icicle', Duchamp muses that the Ventilator might be given a 'butterfly form'.[28] Seminal fluid is here equated with air, as lightweight and inconsequential as the pleasure of shopping. The gas, passing from one state and place to the next, enacts a slow process of activation [figure 6.6].

If the Bachelors are merely empty moulds, the Bride in oils on lead on glass, is also an inverted image. Powered by a kind of internal motor, she hangs above the lower panel. Her floating Blossoming is a horizontal exhalation emerg-

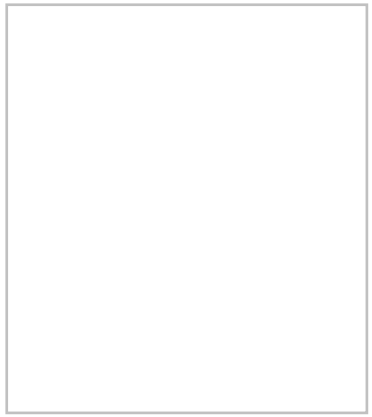

Figure 6.4: Man Ray, *Rrose Sélavy*, c. 1920–1921. Philadelphia Museum of Art.

[25] Duchamp, *Marcel Duchamp, Notes* (1980), note 123.

[26] Cabanne, *Dialogues with Marcel Duchamp* (1987), 48–9. Duchamp, 'The Green Box' (1973), 49.

[27] Duchamp, 'The Green Box' (1973), 50.

[28] Duchamp, 'The Green Box' (1973), 39, 48–53. The Illuminating Gas reappears later in *Etant donnés,* 1946–66, as suggested by the full title *Given: 1° The Waterfall, 2° The Illuminating Gas*: the reclining figure on a bed of sticks, holds up a Bauer gas lamp in her left hand. Cool air is now pumped around to conserve the piece, surprising but fitting for its air of death and erotic decay.

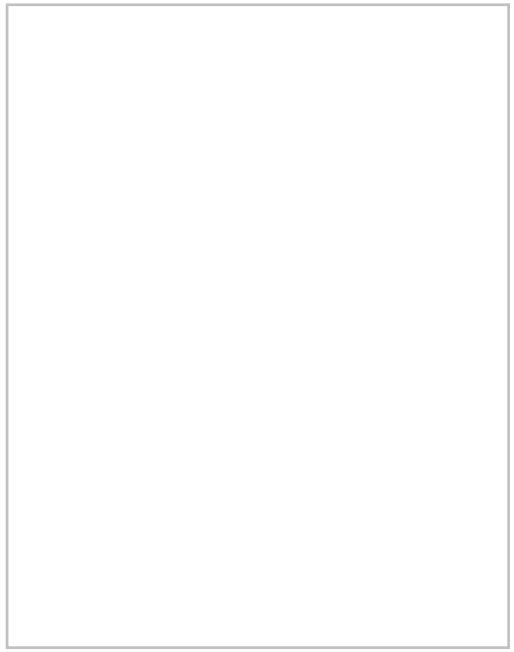

Figure 6.5: Marcel Duchamp, *Large Glass*, 1915–23. Philadelphia Museum of Art. Upper 'Bride' panel. Photograph Emma Cheatle, 2010.

ing from her across the glass, a 'flesh coloured' cloud.[29] The paradigm of ambiguity, she has been interpreted in many ways. French theorist Caroline Cros, for example, pictures her as 'a breath of pleasure signified by a suspended cloud: a "halo", an illuminated veil that stretches space and time across several repetitive sequences, represented by three empty squares.' Cros rather breathlessly continues that she symbolises the 'divine moment of female orgasm [represented in] non-visual language that leaves room for the imagination.'[30] Alternatively, American Dalia Judovitz notes that this upper part has turned the liquid paint into gas. 'An heir to painting, the Bride's projections have reified and dried out her painterly pretension by subjecting her to repeated drafts (draughts). She now emerges as an instance of dry art: more like air (heir), than art (arhhe), understood in the conventional sense.'[31]

The relationship between Bride and Bachelors to me suggests that the window the *Large Glass* undoubtedly is, displays both airy pleasure and dry, draughty infertility. The Bride partly represents fresh air. The empty squares of her Blossoming, the Draught Pistons, which fill or activate her cloud from her internal source, are like open windows maintaining constant freshness. Indeed, Duchamp insisted she remain 'a sort of apotheosis of virginity'.[32] He extended this by leaving the picture incomplete with no Ventilator to the lower panel.[33] The circulation

[29] Duchamp, 'The Green Box' (1973), 36.

[30] Cros, *Marcel Duchamp* (2006), 110.

[31] Dalia Judovitz, *Unpacking Duchamp: Art in Transit* (London: University of California Press, 1998), 70.

[32] Duchamp, 'The Green Box' (1973), 39.

[33] Notes to the Ventilator in the *Green Box* are crossed out. Duchamp, 'The Green Box' (1973), 45, 50. Other parts mentioned in the notes also do not appear in the final piece [figure 2.13].

of the Bachelor's air, though maintaining the repetitious oiling of his parts, falls as spangles, or a 'splash-crash' at the bottom right of the glass.[34] Its potential moistness, which might bring the Bride to life, is impeded. She remains forever suspended at the window before her 'fall', or the 'moment of stripping' as Duchamp called it.[35] Her constant airiness means she becomes, as Judovitz suggested, dried out. Her moisture and life force lost to the air, she is a metaphor for anti-fertility. The open windows of the Draught Pistons, then, signify a 'dry' release. Importantly, neither pleasure, nor conception, is obtained through dry sex. The glass as a window signifies both fresh air and, in contradiction, dry suppression.

In 1923 before it was finished, Duchamp left his unconsummated, dry *Large Glass* and returned to Paris. It represented his relationship with the suffocating past. He abandoned it as he had abandoned Paris (and Serre and daughter, Yvonne) eight years earlier. The post-war Paris he returned to had reclaimed its open air atmosphere. The streets housed *bals*, cafés and glass pavilions, scenes of dancing, cabaret, and relaxed sexual proclivities. Fresh air meant new possibilities.[36]

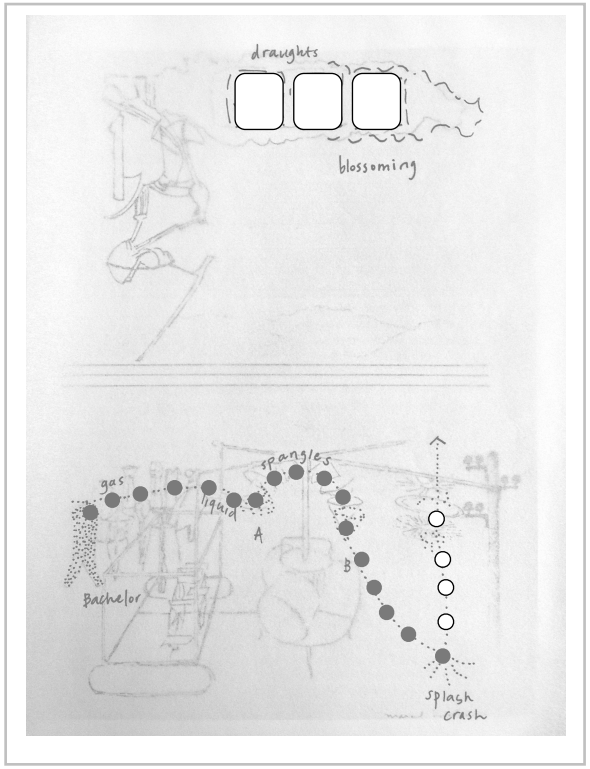

Figure 6.6: Emma Cheatle, *Sketch of Air in the Large Glass*, 2011, over Marcel Duchamp, *Col alités* [Bedridden *Mountains*], 1959.

[34] Duchamp, 'The Green Box' (1973), 63.

[35] Duchamp, 'The Green Box' (1973), 38, 42–44, 48 for use of 'blossoming' and 'fall'. For an argument on the relationship between the Bride's 'blossoming' and her 'fall' in the *Large Glass* and the nude in *Etant donnés*, see Penelope Haralambidou, *The Blossoming of Perspective: An Investigation of Spatial Representation* (unpublished doctoral thesis, University of London, 2003).

[36] Reinstalled in Paris he pursued the optical works *Rotative Demispheres*, 1925, *Disques*, 1926, and *Rotoreliefs*, 1935, and the door installed to rotate between two frames *11 rue Larrey*, 1927 [figure 4.24].

Ventilation and air circulation

> 'until recently all windows (with rare exceptions […]) served the triple function of providing light, ventilation and view.'[37]

Modern architecture's trajectory was also resumed after the war, with focus on ideals of transparency and porosity in dwelling. Le Corbusier claimed Haussmann's 'surgical' cuts through the city were 'truly admirable' achievements, to be followed through with a like *Esprit Nouveau* for the domestic interior.[38] According to Sigfried Giedion, Corbusier's architecture demonstrated just that: 'Corbusier's houses are neither spatial nor plastic: air flows through them! Air becomes a constituent factor! Neither space nor plastic form counts, only RELATION and INTERPENETRATION! There is only a single, indivisible space. The shells fall away between interior and exterior.'[39]

Benjamin called for a further 'interpenetration of street and residence'.[40] He wrote: 'Giedion, Mendelssohn, and Le Corbusier are converting human habitations into the transitional spaces of every imaginable force and wave of light and air. The coming [glass] architecture is dominated by the idea of transparency.'[41] For Benjamin, 'The twentieth century, with its transparency and

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[37] José Luis Sert, 'Windows and Walls', in *Architecture, City Planning, Urban Design* (London: Thames and Hudson, 1967), 192.

[38] Le Corbusier, *Urbanisme* (Paris, 1925), 149.

[39] Sigfried Giedion, *Building in France, Building in Iron, Building in Ferro-Concrete* [1928], (trans.) J. Duncan Berry (Santa Monica: Getty Publications, 1995), 169.

[40] Benjamin, *The Arcades Project* (2002), [M3a,4], [M3a,5], 423–4. Arguably this was exemplified by the arcades a century earlier. See also Giedion, *Building in France* (1995), 53.

[41] Walter Benjamin, 'The Return of the *Flâneur'* [1929], in *Selected Writings, Volume 2 1927–1934* (1999), 264.

porosity, its tendency towards the well lit and airy has put an end to *dwelling* in the old sense,' that is the stifling domestic interior of the nineteenth century.[42] In making dwellings transparent, the bourgeois societal structures oppressing the masses would break open. Giedion demanded building with an: 'overcoming [of] gravity. Light proportions. Openness, free flow of air'.[43] What these ideas suggest is that glass is only truly utopian when its transparency allows it to 'fall away', disappear, in favour of air. By the late twenties then, air, rather than glass, was the true motif of modernity.

Reyner Banham, writing later on the importance of good ventilation in buildings, refers to Konrad Meier's influential 1904 pamphlet 'Reflections on Heating and Ventilation Engineering'. Meier relates that it was smell that indicated 'bad air'. It emanated as much from the body as urban industry: 'excessive amounts of water vapour, sickly odors from respiratory organs, unclean teeth, perspiration, untidy clothing, the presence of microbes due to various conditions, stuffy air from dusty carpets and draperies […] cause greater discomfort and greater ill-health.'[44] Old cramped interiors harboured the odour of ill-health. Clearing them away was essential to removing bad air.

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[42] Benjamin, *The Arcades Project* (2002), [I4,4], 221, my italics. As Benjamin notes in the 'Exposé of 1935', in *The Arcades Project* (2002), 9, 'the shattering of the interior occurs via Jugendstil [Art Nouveau] around the turn of the century.' He continues, 'Of course, according to its own ideology, the Jugendstil movement seems to bring with it the consummation of the interior […] an expression of the personality,' with its stifling ornamentation.

[43] Giedion, *Building in France* (1995), 93.

[44] Konrad Meier, 'Reflections on Heating and Ventilation Engineering', in *Architecture*, vols 9–10 (1904), 20, cited in Reyner Banham, *Architecture of the Well-Tempered Environment* (Chicago: The University of Chicago Press, 1969), 42.

In certain ways the *Maison de Verre* adhered to Giedion and Meier's 'free flow of air' described above: it was a home refigured through a free-plan and an excessive use of glass. It was, though, only partly successful in fulfilling the ideals of modernity. It made several major compromises. Embedded in an eighteenth-century context, the neighbouring party walls and building to the street constrict and overshadow the site. Also, as we have seen in 'Background', the client and architect were unable to completely replace the original building, as the second floor was occupied by a sitting tenant. This apartment, occupied by an old woman, was portrayed by Dr Dalsace as 'sordid', and 'so dark that the employees of the old lady, who would live to be a hundred, were obliged to do their work throughout the day by artificial light.'[45] The *Maison de Verre* was tucked underneath this dingy space. Further, its glass was overwhelmingly *translucent* rather than *transparent*. And, with few openings, it curtailed air flow from exterior to interior.

On completion, G.H. Pingusson remarked: 'la façade a cessé d'exister en tant qu'élement de composition: il n'y a plus de fenêtres ou plutôt, la façade entière est devenue fenêtre.'[46] The glass, though, is translucent and without openings. The interior, though internally highly porous with moveable divisions, is sealed from the city. The second plan drawings from 1928 show a 'baie vitrée, voir la façade sur la cour' (picture window for seeing the courtyard) from the *salon d'attente* (waiting room) [Plate 87]. This was potentially an opening window as

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[45] René Herbst, *Un inventeur, l' architecte Pierre Chareau* (Paris: Édition du Salon des Arts Ménagers, 1954), 7–8. Ironically, the Dalsaces moved into this apartment later in life. Dominique Vellay, *La Maison de Verre: Pierre Chareau's Modernist Masterpiece* (London: Thames & Hudson, 2007), 146.

[46] 'The facade has ceased to exist as an element of composition: there are many windows, or rather the entire facade has become a window.' G.H. Pingusson, in *Architecture d'aujourd'hui*, no. 3 (1931). My translation.

well as a view. Yet the necessity to conceal the interior – particularly from the front, due to the nature of its activities – yet maintain the qualities of light and modernity, resulted in a curtain of translucent glass with no transparency or opening windows. Instead of following the 'interpenetration of residence and street' of the Corbusian house, the 'shells' between interior and exterior in the *Maison de Verre* are carefully stated.[47] The layout of the clinic and the choice of continuous non-opening translucent glass as the primary material maintained a distinct boundary between interior and exterior world.

Chareau declared that he had made 'unlimited surfaces, but without creating the *gaping holes* of large glass plates.'[48] Where rooms at the back of the building – the waiting area and Dalsace's consultation room on the ground floor, boudoir on first, and bedrooms on the third – are naturally ventilated to the garden, the main spaces at the front – the clinic and the salon – are sealed, with little fresh air. Brian Brace Taylor observes this did not go unquestioned at the time. 'The large glazed surfaces – which contained few windows that actually opened – provoked another question from both the public and the municipal authorities. At issue was the ventilation of the interior, and the solution adopted was a mechanical system which took the air outside, filtered and heated it in winter and cooled it in summer, and then pumped it throughout the Maison de Verre by means of

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[47] Some of Le Corbusier's buildings were actually similarly atmospherically contained despite maintaining visual connections with the outside, for example Cité de Refuge, 1932. See Banham, *Architecture of the Well-Tempered Environment* (1969), 126.

[48] Pierre Chareau, 'Une Maison de Verre', in *Glace et Verre*, No. 17 (1930), 19–20; as cited in Yukio Futagawa (ed.), Bernard Bauchet and Marc Vellay, *La Maison de Verre* (Tokyo: A.D.A. Edita, 1988), 10. My italics.

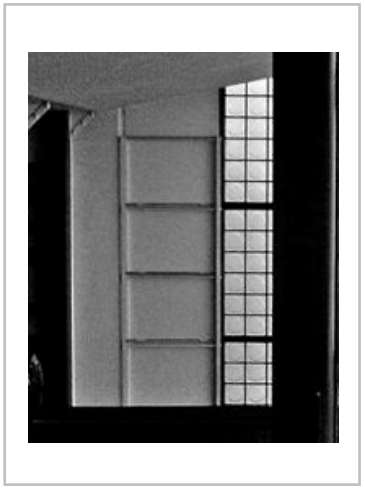

Figure 6.7: Pierre Chareau, *Maison de Verre*, 1928–32. Ventilation louvres. Photograph Emma Cheatle, 2009.

ducts under the floors.'[49] The addition of a panel of steel louvres opened by a revolving wheel completed the ventilation 'system' to the front of the building. Working the heavy wheel, flaps open to a 45° angle to the side of the façade [figure 6.7]. This 'mechanical' opening further challenges the idea of 'natural' ventilation. Situated on the side reveal to the façade, the louvres connect indirectly with the courtyard. Purely functional they are hidden from the exterior (and afford no view from the interior), and in reality provide little airflow.

The mechanical system pumped air through the building in ducts set into the floor substrate, to emerge into the spaces through grills either flush with the floor, or, in a few places, the vertical rising edges to stepped parts of it, creating a regulated interior atmosphere.[50] Ventilation, then, occurs horizontally (like the Bride's blossoming) through the floor plane rather than through the vertical window; and is technological rather than natural, subtle rather than overt. A potential breath of air floats up drily from the feet in eddies rather than as an influx of the exterior atmosphere toward the face.

The regulation of the interior atmosphere made the act of breathing mechanised. Chareau's absence of 'gaping holes' in the front and main parts of the *Maison de Verre* meant that as well as preventing the influx of fresh air to aerate the interior, 'bad smells' or unexpected gases were also kept out. In reality the thin single skin of glass and huge volume of air, particularly in the salon which is

[49] Brian Brace Taylor, *Pierre Chareau: Designer and Architect* (Koln: Taschen, 1992), 29. It was Dr Dalsace who signed the letter to building control confirming that their regulations for sufficient ventilation had been met. There is no verification that the air was both cooled as well as heated, or how.

[50] There are eight of these vents to the ground floor and just one to the first floor. On the second there are strips of vents in the floor running alongside the inside of the rear facade. There is also a radiator strip to the master bathroom. The servant wing appeared to have no heating at all.

open to all three floors, meant a great amount of heat was lost in the winter and that the building operated as a greenhouse in the summer. Dominique Vellay recalls that the building was less than successful at this functional level, expensive to heat and light.[51] Air is a poor heat conductor, as Paul Scheerbart had recognised in 1914.[52] Glass on its own provides inadequate insulation, and therefore the two should be combined as a double skin to retain heat.[53] The free-plan also has few traditional loadbearing walls leading to both lack of containment and of mass. This combination results in a house with little retainment of heat, or coolth and little possibility of draughts for air circulation.

The combination of an absence of the solid wall and the concurrent lack of transparency to give views or fresh air, means the *Maison de Verre's* air is captured, particularly inside the salon and ground floor clinic, with little influx from outside. These parts of the building leave a lasting image of an enclosed ampoule: a large version of Duchamp's *50cc. Air de Paris*. A glass container in tension, its surfaces brittle, breakable and threatening the escape of atmosphere, or the influx of the exterior world. With no openings to alleviate the tension, the glass halts movement of fresh air [Plates 121, 122].

The system of air circulation operating in the building though, is more instated than that of the *Large Glass*. In the Bachelor panel the technically created spangles of air maintain the repetitious oiling of the Bachelor parts, with the Bride, floating out of reach in the horizontal, never receiving them, or the pleasure they promise. In the *Maison de Verre*, the occupant of the building, unlike the

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[51] See Vellay, *La Maison de Verre* (2007), 146.

[52] Paul Scheerbart, *Glass Architecture* (*Glasarchitektur* [1914]) (London: November Books, 1972), 42.

[53] Banham, *Architecture of the Well-Tempered Environment* (1969), 126.

Bride, does receive her invisible, horizontal veil of air through the heating vents. This interiorised mechanism, a response to having no gaping holes exposing it, helped maintain its privacy and promotion of sexual health for future pleasure [Plate 123].

Plate 121: *Internal Air Bubbles,* Maison de Verre, plan, 2012.

1 Entrance / 2 Examination / 3 Surgery / 4 Waiting / 5 Consultation /
6 Dining / 7 Boudoir / 8 Salon / 9 Office / 10 Telephone booth /
11 Bedrooms / 12 Bathroom / 13 Servants / A Ventilation louvres.

Plate 122: *Internal Air Bubbles,* Maison de Verre, section, 2012.

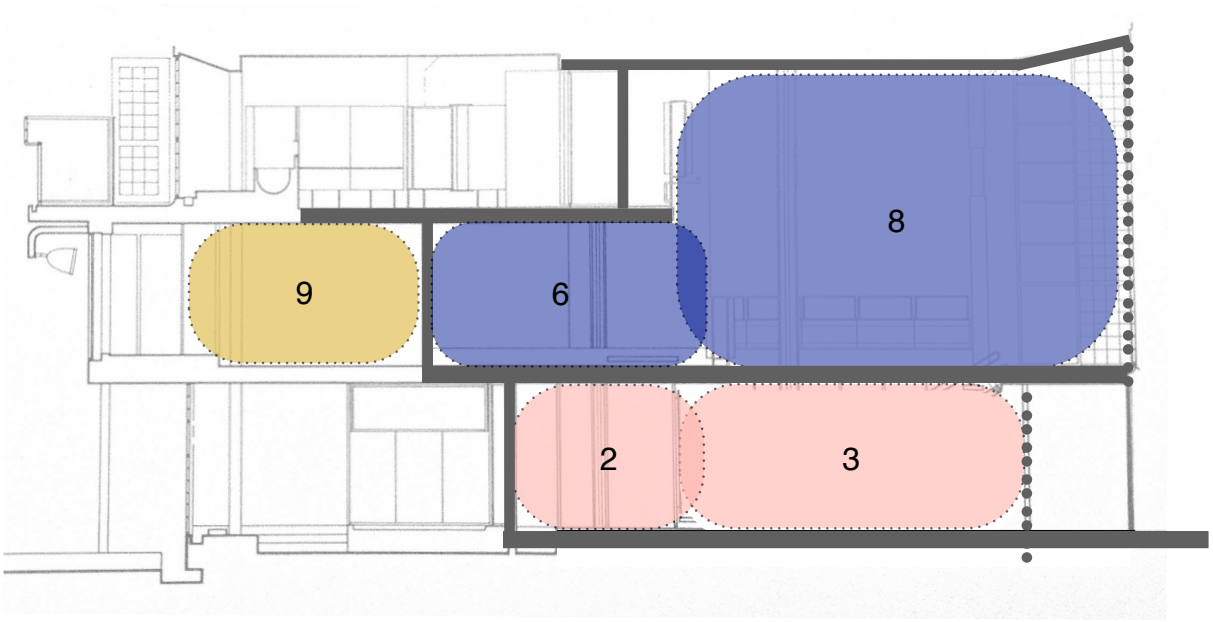
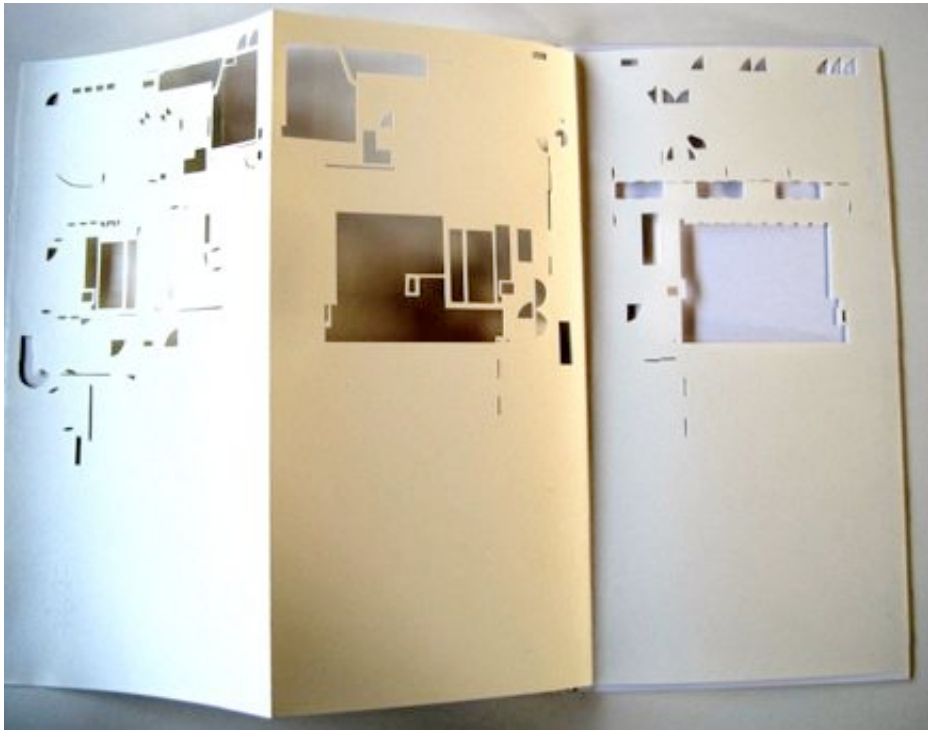


Plate 123: Plan drawings made from cutting through paper and removing space thresholds between paper and air. Compiled into booklet form, 2011.



Infrathin and Irigaray

'The air that touches: invisible presence.'[54]

The maintenance of internal privacy and control of air interchange at the *Maison de Verre*, if not wholly successful in functional terms, signified a complex spatiality of another sort. Despite its classification as a free-plan, the arrangements indicate that something other than the visible or tangible is at work.

In 1930 Duchamp coined the concept of *inframince* (infrathin). He wrote that: 'The possible / the becoming – The passage from / one to the other takes / Place / in the infra thin.'[55] By examining minutely what happens between one action and the next, or one material and another, he noticed that actions or forms that are normally described as separate entities leave a residue, or mark out a space between. Largely invisible, infrathin describes these registers as moments of intimacy. Their 'conductors' are usually sensory: hearing, taste, smell, touch, heat, breath. One example is, 'When the tobacco smoke, Also smells of the mouth which exhales it, The two odours are married by Infra-slim.'[56] Others include: 'condensing vapours – on polished surfaces', 'velvet trousers – their whis-

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[54] Luce Irigaray, *Two be Two* (London: Routledge, 2001), 6.

[55] Duchamp, *Marcel Duchamp, Notes* (1980), note 1, (unpaginated). Duchamp's *inframince* is translated as infrathin or infra-slim, and appears variously as one word, two or hyphenated. Many of the *inframince* statements made throughout the 1930s are collected here as notes 1–46.

[56] Marcel Duchamp, *View*, 5, no.1 (March 1945), in Sanouillet and Peterson (eds.), *Salt Seller (*1973), 194.

tling sound in walking by', 'the warmth of a seat (which has just/ been left)'.[57] He says: 'Smells are more infrathin than colors'.[58] In this way, *Belle Haleine* and *Air de Pari*s, their imagined scent and captured air marrying place, body and time, are works of the infrathin.

Duchamp suggests we may pay attention to our senses: 'One can look at seeing. Can one hear hearing, feel breathing, etc…?'[59] In a related way, Luce Irigaray suggests we remember air is a materiality to be registered. Between the not there (the absence of physical matter), and the there (matter) – lies the not quite there, air. It has figurative and material transparency, yet an all encompassing necessity.[60] 'Air never appears', she says. 'It gives itself and is received without demonstration. […] A sign of presence in and through absence?'[61] It is fluid form, has presence in its absence. Shaped, but not quite contained by the matter around it, it also serves as a constitution through which that matter and habitation are phrased.

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[57] Duchamp, *Marcel Duchamp, Notes* (1980), notes 1, 36, 9, 4.

[58] Duchamp, *Marcel Duchamp, Notes* (1980), note 37.

[59] Sanouillet and Peterson (eds.), *Salt Seller (*1973), 195. The infrathin recalls Hélène Cixous' 'oxymoric' – the use of opposing meanings within phrases and grammatical constructions – to explore density and depth of meaning. For example: 'The secret – we do not have it. It is us/For us it is [Il nous est]. Faith', the idea of 'faith' hovers sensitised in the pause between 'it is us' and 'us it is'. See Hélène Cixous and Mireille Calle-Gruber, *Hélène Cixous: Rootprints: Memory and Life Writing* (London: Routledge, 1997), 173.

[60] Luce Irigaray, *The Forgetting of Air in Martin Heidegger*, (trans.) Mary Beth Mader (London: Athlone, 1999), 9; Maria Cimitile, 'Irigaray in Dialogue with Heidegger', in Maria Cimitile and Elaine P. Miller (eds), *Returning to Irigaray: Feminist Philosophy, Politics, and the Question of Unity* (New York: State University of New York, 2007), 274. Also see Kelly Oliver, 'Vision, Recognition, and a Passion for the Elements', in Cimitile and Miller (eds), *Returning to Irigaray* (2007),121–135.

[61] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 48.

Irigaray's text is a critique of Martin Heidegger's philosophy. For Heidegger, to experience everyday living on earth is to dwell: 'the Old High German word for building, *buan*, means to dwell. This signifies to remain, to stay in place […] to care for, to cultivate.' Hence, 'building is really dwelling'.[62] 'Being', Heidegger's construct for human existence is rooted between concepts of *physis* (nature and poetics) and *technē* (technology). Being positions building on a 'solid crust'. Irigaray criticises Heidegger's *physis*/*technē* dichotomy for being weighted down by building, and for leaving out the 'fluid realities' of water, fire and air.[63] Heidegger's preoccupation with the earth means he never leaves it, remaining solid: 'neither on/in water, nor on/in air, nor on/in fire'.[64] She argues that Heidegger's *physis* is merely a further guise of *technē*. Heidegger's construction of Being has subsumed the female and the poetic: 'the wholly other – the female wholly other – is no longer there'.[65] 'What is left', says Irigaray, 'is the tool, only the tool. And some already-fabricated things.' This recalls the Bride in the *Large Glass*, replaced by a tool, a mechanism.

For Irigaray, air occupies the 'clearing' at the centre of metaphysics. She asks: 'Is not air the whole of our habitation as mortals? Is there a dwelling more vast, more spacious, or even more generally peaceful than that of air?'[66] This open space suggests Irigaray's Being is an undoing of the concrete. It is still contained though, by a metaphorical envelope which forms a glassy sense of bound-

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[62] Martin Heidegger, 'Building Dwelling Thinking', in Martin Heidegger, *Basic Writings* (London: Routledge, 1996), 348–350.

[63] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 3.

[64] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 2.

[65] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 23.

[66] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 8.

ary: 'of what could the envelope of the world be if not of vitrified air?'[67] For Irigaray air, the 'impalpable, imperceptible, invisible, insensible, unintelligible' *is* dwelling.[68] The Bride, despite being mechanical, perhaps picks up on this after all. Her Blossoming or being is propelled by draughts, ultimately contained by planes of vitreous glass.

Irigaray's air and Duchamp's infrathin coalesce as methods of thinking about space and inhabitation, to challenge the idea that architecture is only objective, concrete, tangible. Thinking of air as an infrathin, or the infrathin of air, suggests paying attention to it as a form, as a state between states, through which inhabitations transmit or leave something behind.

Fissure

The *Large Glass*, I argue, is a register of the infrathin in the two opposing ways it forms air: casting it as gas, and as a 'cut' through space and time. Firstly, as described above, the Bachelor Moulds are vessels which capture a cast of gas before distributing it as a liquid, which in turn becomes 'unequal spangles, lighter than air.'[69] The spangles aim to attach themselves to the interior of the Bride. She, simultaneously, is billowing with an internal draught of her own, which creates a floating veil suspended across the glass. The air transmitted between the body forms and spaces of the *Large Glass* implies the infrathin residue of body fluids and mingling of breath, during the moments leading up to intercourse.

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[67] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 16.

[68] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 5.

[69] Duchamp, 'The Green Box' (1973), 48.

This idea of air, in moulded and shifting states, is contradicted by the fact that the *Large Glass* is a 'cut'.[70] One note states: 'cutting (*noun*) – cutting (*adj*.) (guillotine, razor blades / sliding'.[71] The glass is a slice through time, a frame describing a moment before the mingling of the Bride and Bachelors. The cut also creates airlessness: it is a pause or stoppage of breath, a closing off of air.[72] This idea of cutting was made literally when the *Large Glass* was shattered. The two panels of glass, displaying the separated narratives of Bride and Bachelors, were stored one on top of the other after the 1926 Brooklyn Exhibition and probably broken while transported. The moment of sound as they shattered was never heard. The resultant cracks, 'cuts', on each panel were a mirror image, twin, to the other. Duchamp continues in his note that the cut implies: 'Porosity […] Permeability / to water and air […] Infrathin / caresses'.[73] To my mind, the moment of accidental breakage, a sign of glass' inherent brittle materiality, combined the Bride and Bachelors, became their consummation, their marriage. The thin plates of glass when cut were permeated by ephemeral slivers of light, reflections, shadows and air, going some way to reinstating the breath, an infrathin moment of intimacy as gas, lead, paint, dust mingling. [Plate 124].

The cracks ended one phase of its life and began another. Rather than return the *Large Glass* to its pure state Duchamp allowed the infrathin moment to remain indexed. When he finally repaired it in 1936, he interred the broken plates

[70] Duchamp, 'The Green Box' (1973), 74.

[71] Duchamp, *Marcel Duchamp, Notes* (1980), note 26.

[72] Duchamp writes, 'Establish a society in which the individual has to pay for the air he breathes (air meter; imprisonment and rarefied air, in case of non-payment simple asphyxiation if necessary (cut off the air)'. Duchamp, 'The Green Box' (1973), 31.

[73] Duchamp, *Marcel Duchamp, Notes* (1980), note 26.

Figure 6.8: Marcel Duchamp, *Large Glass*, 1915–23. Photograph Emma Cheatle, 2010.

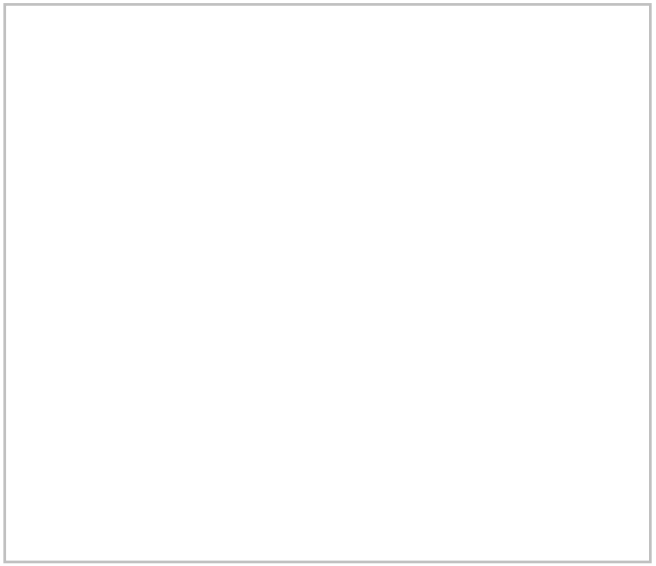

Figure 6.9: Marcel Duchamp, *Large Glass*, 1915–23. Photograph Emma Cheatle, 2010.

between two further layers of glass.[74] It remained: 'The quarrel / of the cast / shadow in its / relationship with the / infra-thin' [figure 6.8, 6.9].[75]

The glass walls of the *Maison de Verre* envelope its air. Despite the lack of formal openings, except in the rear façade, other gaps and holes are present in the interior as minuscule lines. As discussed in the previous chapter, the fabric of the building is slowly decaying into cracks and dust particles. Air promotes desiccation, evaporating moisture and oils from materials. Oxygen, the most reactive of gases in the atmosphere seeks out elements to combine with: oxidate. It is so susceptible to doing this that its abundance is only due to the continual photosynthesis of plant life. Oxidation and time fragment the *Maison de Verre*.

Irigaray suggests that forgetting about air, through the habitual repetition of dwelling, leads to a crisis. Man, she says, 'forgets the framing of this home. He forgets that for him dwelling is the fundamental *trait* of Being.'[76] The translator points out in her note. '*Le trait* here means '"character" or "feature". But it is also the standard French translation of Heidegger's *der Riss*, "the stroke" or "rending-stroke," as well as "crack", "fissure", "outline", "tracing", "rift".'[77] The cracks in a home signify the forgotten air: they are the trace of a forgotten inhabitation; a symbol of the ruined past. They are also a characteristic of life and through air continuing to flow in the cracks, traits, suggest a possible future.

Elsewhere, Irigaray describes air as 'you who flow between one and the other but without destroying either's boundaries proper, you who respect the skin

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[74] *Étant donné no 9* (Paris: Association pour l'Étude de Marcel Duchamp, 2009), 221–225.

[75] Duchamp, *Marcel Duchamp, Notes* (1980), note 40.

[76] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 67. My italics.

[77] Mary Beth Mader's note in Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 186, n.4.

and nourish it, and who procure the medium for every contact […] whose distance allows us to approach each other'.[78] Dwelling is breathing: both are the feature of life and the ruin of it. The cracks represent not only a rift, but a conjoining, marrying, of two states, an infrathin. The *Maison de Verre* is cracked open revealing its history and stating its presence as a future artefact. Air bubbles of factory emissions are incorporated into the pressed glass sheets and lenses, cast as blobs and textures picking up light [Plate 125]. Air creeps into the lines of cracks, opens them and at a tiny scale takes up its ruinous occupation. There is the smell of dust on the rubber. The breath of past occupants wafts in the ducts. Air, which flows between the building now and in the past, between me and the former inhabitants, joins the ruin and future. Breathy eruptions in the built structure and fabric fold us both backwards in a process of remembering (history) and forwards in breathing and dwelling (design).

[78] Irigaray, *Two be Two* (2001), 116.

Plate 124: Reconstructing the infrathin moment of shattering of the *Large Glass*, 2012.

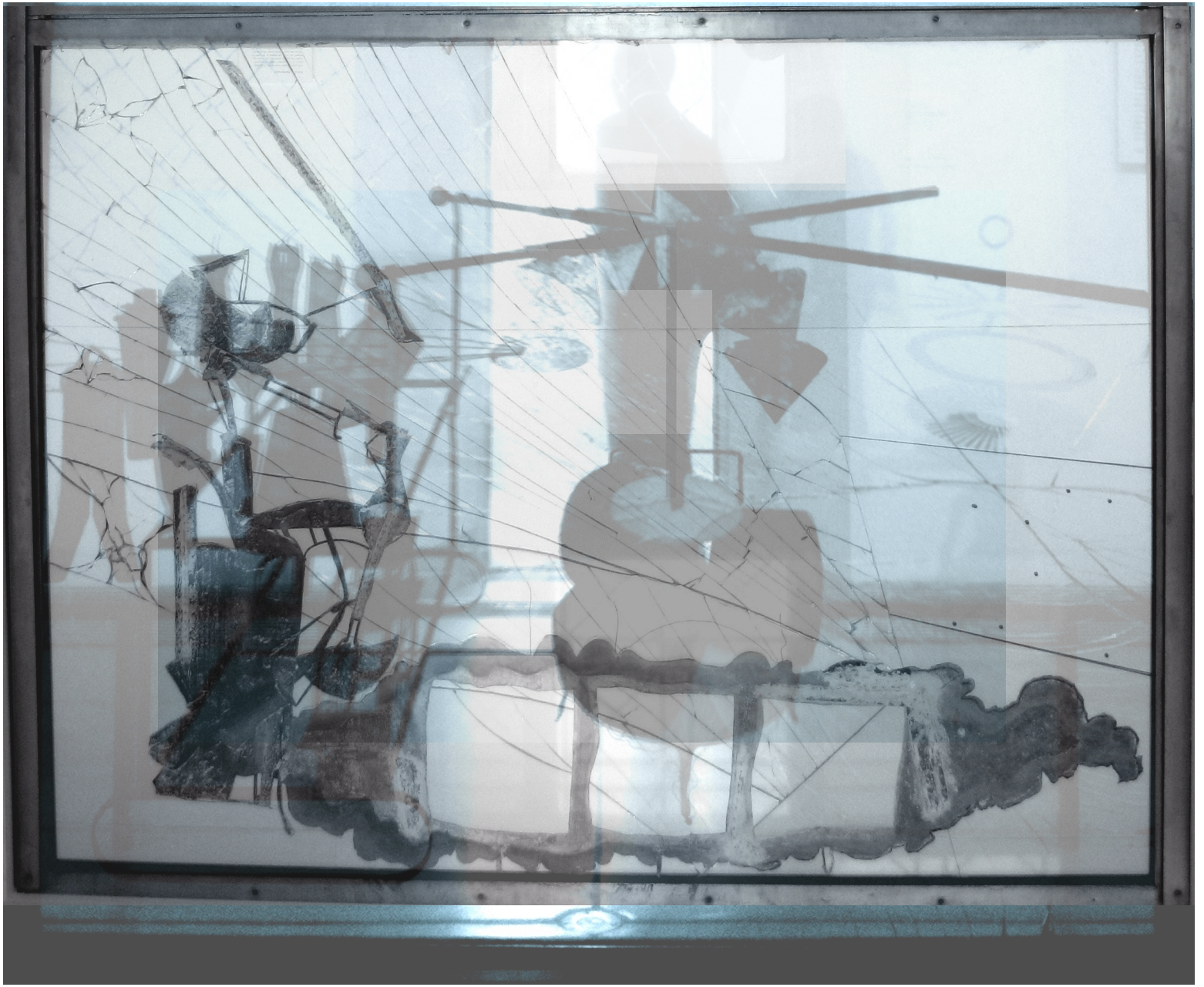
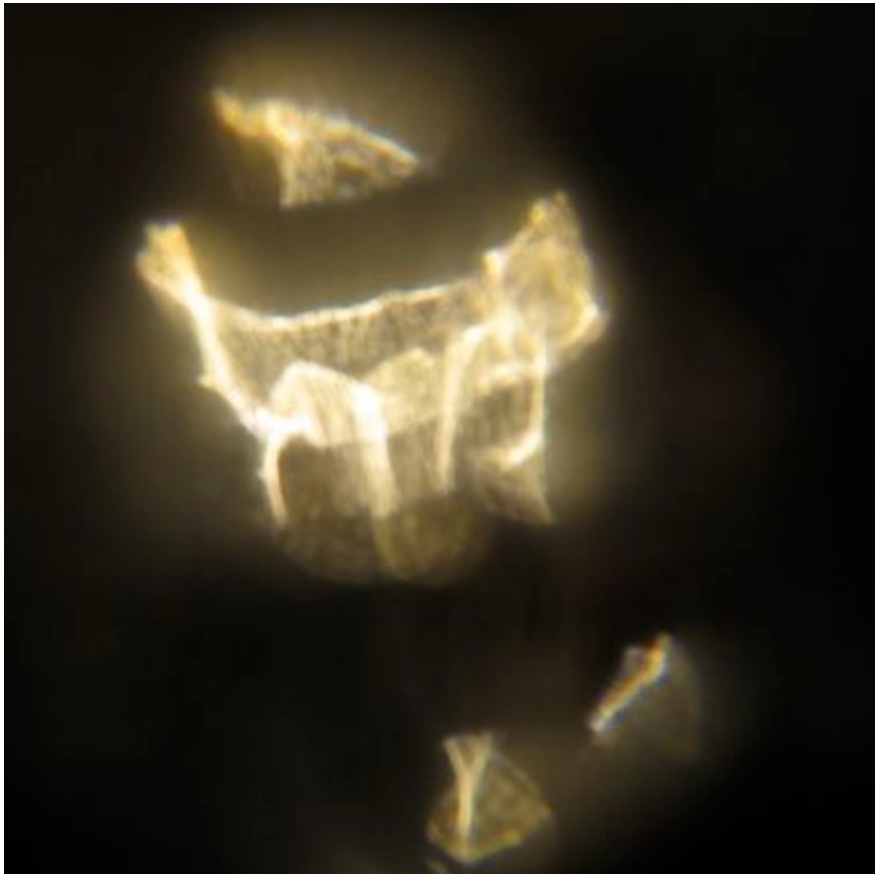


Plate 125: Looking into a lens at the *Maison de Verre*, 2010.



Cast Air

The *Maison de Verre's* plan has few entrances or thresholds in the accepted architectural sense. Physical boundaries between rooms are often partial. Where doors exist they act as screens or are doubled to create valve-like deep thresholds – holding spaces which maintain air flow. Single doors swinging into fixed openings only exist in the ground floor clinic, where containment is necessary, or in the servant wing. Floor materials are continuous. Where there are changes, they are seamless. In one place, for example, white rubber to black ceramic tiles are smoothly interfaced. In another a groove is cut into a timber threshold for a sliding door, yet the materials stay neatly flush [figure 6.10]. At these points, it is as though the building eliminates the notion of fear derived from the classification of space. The body is instead in a continuous fold.

Most notable is the absence of a clear point of entry to the building from the courtyard. As I have already explored, the entrance is initially masked. It is marked out as a possibility through the stepped back portion of facade to the right of the ground floor level, with its sheltered undercroft. The heavy line of black beam would not originally have been there as the steel of the original facade was coated with mortar [figure 6.11 cf. 1.1]. The undercroft creates a portico of sorts and has a slightly raised floor, not a full step up. It is floored with white rubber tiles, an interior material on an exterior floor. The entrance door, perpendicular in plan to the two parts of the façade, has neither step nor threshold strip and the white rubber tiles continue seamlessly into the building and cover much of the floor throughout [figure 4.24]. On entering, one is in a vestibule as previously described and must open another sliding door to enter the true interior. Despite the continuation of floor, one has the feeling of passing into the building in stages, with the air quality stabilised at each point.

Figure 6.10: Pierre Chareau, *Maison de Verre*, 1928–32. (**top**) Floor between consultation and examination rooms, ground floor. (**bottom**) Floor between corridor and servant areas, ground floor. Photograph Emma Cheatle, 2009.

Figure 6.11: Pierre Chareau, *Maison de Verre*, 1928–32. Front façade from courtyard. Photograph from René Herbst, *Un inventeur, l' architecte Pierre Chareau* (Paris: Édition du Salon des Arts Ménagers, 1954), 14.

It would, however, be a mistake to suggest that the building is a seamless flow of space throughout. The servant areas, in particular, are all threshold, trapping air into pockets and compartments. These rooms are identifiably different from the house in scale, establishing the gap between servant and owner, yet maintaining useful discreet interfaces between them. The rooms are not only smaller but interconnected with installations of doors in valved sequences. One room leads to another, one cupboard onto another, with little observance for private and public separation. On the second floor, for example, the small bedroom leads off the laundry room through a complicated set of sliding and pivoting doors [figure 6.12]. Adjacent to the laundry room is a deep washing cupboard, with a cupboard within that. In the passage, more cupboards with pivoting doors within sliding doors, a dumbwaiter and passenger lift are positioned. Indeed, the relatively small area of the servant areas, around 45 sq.m over three floors, has no less than thirty-nine doors of various scales to open and close, rearrange, revolve or slide past, and possibly more depending on the method of counting. The space is hence configured by numerous internal thresholds of opening and closing. These would have kept the servants both busy – in the act of moving between, into and through spaces – and fragmented by the actions of opening, closing, revolving, sliding, servicing.

The air in these rooms is contained, portioned. The servants breathe a different atmosphere. And unlike those in main part of the front of the building, these inhabitants are afforded ‘gaping holes’. Transparent ones at that. Modernist lines of glass stripe each of the three floors of the wing: with clear, functional views of the courtyard and approaching visitors, and opening panes for fresh air [figure 6.11]. This, along with the absence of technologically filtered air pumped into the wing, gives an alternative atmosphere to their inhabitation. They are not

inhaling the same air; it is not their house. They are part of the public world, the outside, rather than the rarefied internal privatised world.

The rest of the interior of the house, though, operates a different form of boundary. It can be read as flows or casts of air perceived as climatic, olfactory, and aural. Irigaray's initial rather conventional definition of space: 'Place being only in virtue of its boundary: between a within and a without, an exterior and an interior', is extended to define edge as: 'void, spacing, gap, border, boundary, it orders representation, it shelters, frames, and aids'.[79] The *Maison de Verre* is marked by voids, gaps, borders, frames, soffits, edges. At many points a step is added in the floor, or lowering of ceiling occurs. These are located not at the doorway to the room, but well before, or within a room. As noted, floor materials extend from one area into another. There are sudden double or triple height voids. These instances create unexpected zones of abeyance, which, instead of delineating space offer strange places in their own right. For this reason the *Maison de Verre* begins to feel not so much like a building with a free-plan but one with shifts in the interior space. These thresholds are defined not by material edges but as between one state of being and another. They are indecisive moments of stasis in a promenade, or lulls in atmospheric qualities. Their quality implies a difference between rooms proper and those places which are hovering, in which one hovers, suggesting places for private recomposition of the inhabitant between rooms. They are not attached to a named space – boudoir, office, dining room – or delineating two named spaces but unnamed, or between names. They are a casting or moulding of air.

The recomposition of place and self occurs in these 'air-casts' in the *Maison de Verre*. Each instance occurs in or adjacent to spaces in the building I

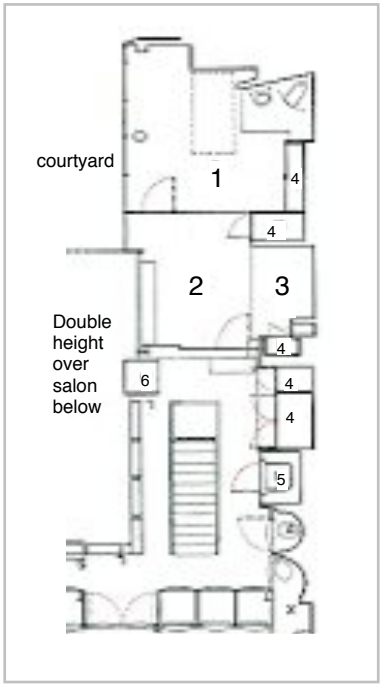


Figure 6.12: Pierre Chareau, *Maison de Verre*, 1928–32. Second floor plan, servant areas. 1: bedroom; 2: laundry; 3: washing area; 4: cupboards; 5: lift; 6: dumbwaiter. Emma Cheatle, 2012.

[79] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 19, 75.

have already described, and acts as a threshold to the descriptions found in 'Glass' and 'Dust'. The air in these spaces, the not-rooms, is notable. It becomes the palpable mediating material which carries atmospheric changes in drifts through the house, splitting into infrathin qualities of sound, smell and climate. Sound is a key component. Jean Dalsace said on completion of the building: 'The light circulates freely through this block, the first floor of which is devoted to medicine, the second floor to social life and the third to nighttime privacy. The problem this raised was enormously difficult to resolve. Interconnecting rooms, certain of which occupy two floors, make the problem of soundproofing very difficult.'[80] Dominique Vellay remembers the house as: 'an enormous sound box, I could hear the door of grandfather's study sliding open and shut, and the rush of water through pipes in the bathroom.'[81]

The space must have had an equally strong set of smells. The building's materials, cracks and dust must have smelt as many events as they witnessed and heard. Artist Sharon Kivland asks, 'What if the object disappears like [a] faint waft of scented air?'[82] The smells of the building – of clinical alcohol and flesh, perfume and decay, of cooking, eating, defecation and bathing – and the objects they emanated from, have disappeared. In the past, they wafted, rising and sinking. Now faint, scent – an ephemeral register of your body into the nasal passages of mine – has been lost to the passage of time, it is the past.

The thresholds of the *Maison de Verre* give a sense that one is always transitional, possibly overseen, smelled or heard, overlooking or overhearing. The

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[80] 1932 interview with Jean Dalsace, Herbst, *Un inventeur, l' architecte Pierre Chareau* (1954), 14.

[81] Vellay, *La Maison de Verre* (2007), 8.

[82] Sharon Kivland, *Les bonheur des femmes*, 2000–2002, at http://lightsculpture.pagesperso-orange.fr/sharon/exhibit.html.

Maison de Verre's air-cast thresholds are hence aural, olfactory and visual *pas de deux* or *trois*, breaking down the hierarchy between one and other. The following writing project describes three of these [Plates 126–28].[83] Each utilises air differently to highlight the separations and overlaps between inhabitants – and the alternative interchanges that takes place – marriages of sound, reflection and light. The external material qualities folded around give different textures – timbre, smell, taste even. Sounds – voices, scrapes, rings, shuffles, slides – move between muffled and clear, high and low, round and sharp their direction invisible, as they move, weighted, through the differential air. The building is composed of these fluidities in waves and circles. Felt rather than seen, seen at the same time as felt, or seen differently than felt. Each inhabitant an aural witness to the others, and likewise dislocated by being overheard.

[83] In two sessions in September 2009, and November 2010 I spent three days mapping the thresholds of the building. The descriptions in a narrative voice were written whilst in the house. Keeping my eyes partly shut I was listening, smelling, sounding.

Plate 126: *Air-Cast*, writing 1, 2011.

A patient visiting the clinic finds herself walking down three steps in the middle of the corridor. In the clinic waiting room she sits for a while. This is a transitional space, not a room at all, but a space between the corridor and the three steps she has just come down and a second set of three steps up towards the clinic. A further set of three steps lie out of view inside the reception's office, for the doctor to descend towards her. A space for waiting between three sets of triple steps. This dip in the plan is a place to which noises drift on currants of air: of typing coming from the reception room, a sharp laugh from further away. The light is failing, and though the glass of the rear façade, it is caught and refracted in the facets of the glass lenses. Warm air wafts through vents, the faint scent of dust and rosewater masks something unseemly.

Her image on four reflective black lacquered doors wobbles and streaks fourfold in the textured light. The curve of the door picks up movement from somewhere she cannot see. Footsteps come closer, a shuffle, a voice and then the sound of a piano playing, quite loudly elsewhere. Life in the building continues as if a bubble from the outside, whilst hers has momentarily stopped.

Plate 127: *Air-Cast*, writing 2, 2011.

It is early evening. A visitor walks up the main stair, with a sense of vertigo as he ascends. At the top is a square platform in front of the lensed front façade, two steps lower than the salon he is trying to reach. The light from the spotlights outside comes through thickly refracted, with little worms of bright light. The ceiling is double height above the stair, revealing all three floors at once. He is almost in the salon, yet kept waiting for a moment in this lower ante-space. He has heard their babble on entry through the front door, as it bounces around the large double height room, barely dented by the screens and sofas, working into the curve of the lenses and back down through the building. The noise has now lowered to a murmur. From his ante-space he is shortened in effect by 370 mm, and they, the collected guests in the salon who have watched his head rise up the main steps as he ascends, are looking down on him. He hurries up the remaining 370 mm into the room to become their equal, stepping over the vent through which a warm air drifts.

Plate 128: *Air-Cast*, writing 3, 2011.

On another occasion he is to be received by Madame Dalsace in her boudoir. It is not quite four o'clock in the afternoon. He ascends the steps to the empty salon. The light is low and the front façade is cold, darkening from the outside air. There is sound, perhaps a distant cough from downstairs, a murmur of voice, movement. He can feel the air in the building, smell a slight whiff of ammonia and food aromas. He walks through the salon, past Dr Dalsace's office whose sliding wall is firmly shut, down two steps into the dining area towards the back of the house. Ceiling lowers from double height to single. The sounds drop and all is subdued here. As he nears the curve of her boudoir, there is a step up and the ceiling lowers further. He is in a small ante-space, equal and opposite to the one at the top of the main stair, completely enclosed rather than open and exposed. He hesitates in this muffled warm pocket of enclosure. For a moment, he can hear nothing of the rest of the house. The translucent mottled glass sliding door ahead is almost closed and he must slide it gently open. He enters closing it again after himself, and avoids looking back around across his right shoulder in case he glimpses the blurred shape of the doctor in his office through the side panes of glass. He smells her perfume, L'heure bleue, before he sees her. Then there she is, reclining on a daybed to the side of the room on the raised part of the floor. He is also raised up, and because he is standing it is as if he is on a dais or stage, to be examined by her, and waits for her gesture before stepping down into the room proper. He seats himself and becomes lower than her, as she remains a step higher. With the layers of soft furnishings, wall hangings, carpet and curtains, it is quiet and dim in this room. It is chilly, heated a little by the lit fire coming from near the inner corner, but remaining soft, quiet and cold.

> 'no other element carries with it – or lets it be passed through by – light and shadow, voice or silence.'[84]

Sounding

Sound – like light, colour and smell – is ephemeral and unpredictable. It resounds off the material of objects and buildings, into the air-casts of spaces. These measure each sensory quality at a different rate, speed and weight. In her essay 'Flesh Colors' Irigaray notes: 'the speed of sound and light are not at all the same'. Like Lacan, she stresses that in the psychoanalytic setting, the voice is emphasised. Time and patience mean that: 'everything has to pass through sound', potentially delaying the reception of light for the patient.[85] Following Klee's assertion that painting can '*make time simultaneous*', Irigaray suggests the presence of colour can 'find a balance between hearing, sight and touch, between sound and light.'[86] Further, as Kelly Oliver argues, Irigaray's sense of vision binds colour to voice.[87] The voice forms complex combinations of timbre, intensity, pitch, travel, shade and tone. Irigaray says: 'The articulations of the letters, as they are pronounced and received, do not correspond to the same colors. There is the pitch of the sounds, their volume, but there is also the shape of the letters. Thus, the labials are dark; the darkest of all is the *m*. The dentals are light. Of the vowels, *a* is chromatically the richest and is called the origin of all colors.'[88] Fur-

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[84] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 8.

[85] Luce Irigaray, 'Flesh Colors', in Irigaray, *Sexes and Genealogies* (trans.) Gillian C. Gill (New York: Columbia University Press, 1993), 153–4.

[86] Irigaray, 'Flesh Colors' (1993), 155–6.

[87] Oliver, 'Vision, Recognition, and a Passion for the Elements' (2007), 134.

[88] Irigaray, 'Flesh Colors' (1993), 158.

ther, for me, the voice – shaped by the throat and mouth, gender and culture – is formed and forms space. Its sound leaves the moistness of the mouth and lips, moves and is shaped across the air in the room, against its harsh, soft, dense, coloured materials, to the interior of the ear. It incorporates feeling as it pulses across its flesh, scooped from the outer ear into its orifice, into the darkness of the cochlea.

As we trace its circulation of gas through its elements – Bride, Bachelors, Sieves, Chocolate Grinder, Draughts and so on – the *Large Glass* converts the visual into the corporeal. The presence of those elements, as forms, colours and materials, is a trigger for that experience. The colour of the Bride, as much as her form, particularly preoccupied Duchamp. As discussed, he used glass for its elimination of oxidation and preservation of paint colour.[89] On the earlier painted studies, he notes that her flesh is 'coloured light', listing, 'Pink: Light burnt ochre and white … Brown backgrounds: pure raw sienna with a little light burnt ochre and some white … Light yellow: light ochre and white … Machinery: Gold ochre … Bridge: Cyprus burnt umber'.[90] When this painting was translated onto the glass, the Bride was painted 'a kind of milky way *flesh color*' onto lead.[91] Duchamp also notes elsewhere, under the heading '*Breeding of Colors'*, '*Perfumes* (?) of reds, of blues, of greens or of grays'.[92] The upper panel of the *Large Glass* is accordingly pale pinkish, whites, yellows and greys, suggesting skin, flesh, or a milky emanation. The Chocolate Grinder, Bachelor Moulds and Sieves of the Bachelor panel appear as chocolates, reds and yellow-brown dust set in a

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[89] See Cabanne, *Dialogues with Marcel Duchamp* (1987), 38–9.

[90] Duchamp, 'A l'Infinitif' (1973), 82.

[91] Duchamp, 'The Green Box' (1973), 36.

[92] Duchamp, 'The Green Box' (1973), 70.

fluid varnish, suggesting food (chocolate) as well as bodily emission (faeces, semen). As a cut, the aim of the glass was to preserve this coloured, scented flesh and its processes. It made an airless, framed slice of bodies in time, like a large microscope slide.[93] As a preservation, scent and touch are eliminated, with colour remaining a reminder/remainder of them.

If, as for Irigaray, colour triggers sound, the coloured elements of the *Large Glass* grind, wheeze and splash-crash (Bachelors) and blow, ooze and sputter (Bride). As Duchamp notes it is a 'sculptured sound form', 'to be heard (or listened to) with one ear', while 'looked at with a single eye'.[94] Likewise as an oeuvre, his work is underpinned with homophones, and word traps which transport the spectator/hearer from one thought or place to another. With examples including 'Sels de bains belle de seins [Bath salts beautiful of the Seine]' and 'Aiguiser l'ouïe (forme de torture) [Sharpened hearing (form of torture)]', I have the idea that 'cut' may sound much like 'cunt' if heard quickly.[95] Again, sound appears as an infrathin, creating a new space/word/feeling between the spoken and heard.

The cracks on the glass, disturbing the preservation of the elements, allowed air to seep in for a period, perhaps undoing its colours. Repaired by Duchamp between more layers of glass its infrathin shatterings, scents, blossom-

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[93] I think this is reinforced in *Etant donnés,* 1946–66. The Nude here, although she holds up a flickering light in her hand, has an air of being preserved at the moment of her 'fall'. The hand is erect, perhaps in rigour mortis.

[94] Duchamp, 'A l'Infinitif' (1973), 75–6.

[95] Duchamp, 'The Green Box' (1973), 31. See Marcel Duchamp, 'Rrose Sélavy & Co.' (trans.) David Ball, Ron Padgett, Roger Shattuck, Trevor Winkfield and Elmer Peterson, in Sanouillet and Peterson (eds.), *The Writings of Marcel Duchamp* (1973), 105–119. The first is from the 1947 International Surrealist Exposition catalogue cover accompanying *Prière de toucher* (*Please Touch*); the second of unknown origin, page 113.

ings and grindings are distant echoes, virtual renderings in the remaining colours and shapes.[96]

Building materials carry sound into the present. Their colour, through vision, links their materiality to sound. The *Maison de Verre* is a mute palette of white rubber, white render, greenish-grey glass, orange steel, black steel, aluminium, dark timbers, travertines. The building is sounded and felt through them, bouncing through the air: round, flat, slow, light and dark. Combinations of materials, colours and senses occur: off-white rubber, round and absorbent; black slate, dark and warm; flecked terrazzo, creamy and shrill; black terrazzo walls, grainy, cold; burnt umbre mahogany floor strips, slow and light; flat grey duralumin, dull; thick greenish glass lenses, turning milky as they cup light, scooping and amplifying each noise; mottled greyish glass screens of dark cracks; perforated metals, sound streamed into each hole. Painted materials recall flesh as they convey their sound: glistening black doors as reflective as the pupil of the eye, bouncing the voice off their curve; orange painted columns, tense sinews pulled up through the building, with muffled pockets in the reveals.

The material colour-sound of the building is fluid and overlapping except in two spaces: the only two completely enclosed windowless rooms [Plate 129]. These two rooms register the past encoded into their strange materials and atmosphere. The first, the examination room on the ground floor, is closable from both ends by a heavy sliding duralumin wall from the Dr's consultation room, and pivoting white painted valve doors to a toilet and the surgery. The two-sided vitrine of instruments and experiments glows in the wall between. The room has a stillness when closed off. It is dark except for task lighting, and pumped with warm air though the circular changing booth floor. An interior space for the folded quiet

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[96] Duchamp, 'A l'Infinitif' (1973), 99.

interior of the naked female body, its materials are hard, deflective. The floor of pale flecked travertine and the walls lined with reflective milky glass sheets, easy to wipe clean, are sharp in sound and image. In contrast, the single unlined wall, painted matt pale yellow-pink, as fresh as slightly jaundiced new born skin, reconnects with the body lying on the table.[97] The only paint colour in the house, it recalls the milky flesh colour of the blossoming Bride. The wall adjoins the surgery, whose side is plastered with a continuous black travertine. The examination room baffles sound. Fitting the functions occurring within, when the doors are closed, the room cannot be heard.

The second interior room is the telephone booth on the first floor. Although not included in the original building, Dr Dalsace had this installed just after completion.[98] The instatement, after the First World War, of the telephone into bourgeois homes instigated a startling inversion of public and private realms. Operated as a new controlled interchange, it linked two interior private realms potentially unknown to each other. The transpositional transparency of modernity was completed with its technology (along with that of the radio), as it undermined the solidity of wall, stripping bare former privacies, enabling new transactions and

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[97] It is not certain that this is an original colour as early photographs are black and white. The rest of the plasterwork, where it occurs in the building, is white. I am fairly sure the pinky colour has been there a long time as all other features and colours have been retained over the years. It is a myth that modern architecture contained no colour, but as Deborah Gans shows Le Corbusier's work incorporates many colours each with signification, Deborah Gans, *The Le Corbusier Guide* (Princeton: Princeton Architectural Press, 2006), 58, 84, 131. Also see Jan de Heer, *The Architectonic Colour: Polychromy in the Purist Architecture of Le Corbusier* (Rotterdam: 010 Publishers, 2009).

[98] Paul Nelson reviewing the house in 1933, wrote 'Amplification is the essential characteristic of this new life. […] the telephone, the telegraph and the automobile are all conquests in two dimensions, while the airplane, the radio and the television are conquests in three.' The house by incorporating all of these 'amplifications' into feeling became a model of the fourth dimension. See *L'Architecture d'Aujourd hui,* No. 9, November/ December 1933, 9. Also see Taylor, *Pierre Chareau* (1992), 130.

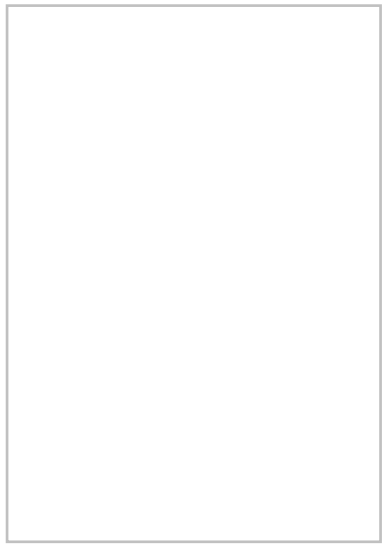

Figure 6.13: Pierre Chareau, *Maison de Verre*, 1928–32. Telephone booth. Dominique Vellay, *La Maison de Verre: Pierre Chareau's Modernist Masterpiece* (London: Thames & Hudson, 2007), 69. Photograph François Halard.

introducing the external voice of 'electric speech' into and out of the home.[99] Former qualities and hierarchies of space were invisibly cut through.

The telephone at the *Maison de Verre* was installed in an existing cupboard [figure 6.13]. The cupboard was a completely separated free-standing room in Dr Dalsace's first floor office, transformed into a tiny soundproofed room by a layer of duralumin with wadding behind. Completely dark, when the door swung shut behind the occupant a light was activated by pressure from the foot on a large plate on the floor.[100] The booth was further separated and soundproofed from the more public areas of the house by the sliding screen door to Dr Dalsace's office. Discrete, the booth was the apotheosis of discretion: arguably the only place in the house where conversation could not be overheard. I propose its function was clear, for Dr Dalsace to make private phone calls of a sensitive nature to his patients. It maintained a delicacy to the two private realms of doctor and patient: a delicacy which resisted interest or interference not only from strangers who may be in the house but from Madame Dalsace.[101] It is unclear why the telephone was not included in the original specification of the house, given its very personal brief. Did the Doctor only realise the need for such privacy after occupation?

The telephone booth, with its single door, was the only completely internal private room in the whole house, with no potential for overhearing or overlooking. Dark, grey, muffled. Yet the mechanism of the telephone exchange meant two things. Firstly, the room transmitted the voice outside, beyond the walls of the

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[99] 'Electric speech' is Avital Ronell's phrase. See Avital Ronell, *The Telephone Book: Technology, Schizophrenia, Electric Speech* (Lincoln University of Nebraska Press, 1989).

[100] Vellay, *La Maison de Verre* (2007), 66, 69.

[101] This assertion is backed up by the need for discretion discussed in the chapter 'Dust'.

building. Secondly, the private conversation of the two parties was linked through a third external party, the operator. Invariably female, with 'softer voices, more patience, nimbler fingers', she may have been listening.[102] In the end the conversation is potentially leaked to, or overheard by, not the rest of the house, but a female public exterior. In a sense, this may have worked in a similar way to the presence of a third party, the nurse, in the gynaecological examination, discussed in 'Glass'; the nurse, or operator in this case, maintains a seemliness to the proceedings. Entering Dalsace's telephone booth is like entering a vertical sarcophagus, with the inclusion of a strange remote connection to someone on the outside world. The air inside is stifling after several minutes, and the bare lightbulb almost blinding, which must have precluded any lengthy or social use with the door closed.

[102] Telephones in France were connected through a third party until the 1970s, the telephone exchange who had the potential to be listening in. Ronell, *The Telephone Book* (1989), 301; citing A. W. Merrill et al, *Book Two: History and Identification of Old Telephones* (La Crosse: R. H. Knappen, 1974), 29.

Plate 129: *Windowless Muffled Rooms*, 2011

1 Entrance / 2 Examination / 3 Surgery / 4 Waiting / 5 Consultation /
6 Dining / 7 Boudoir / 8 Salon / 9 Office / 10 Telephone booth /
11 Bedrooms / 12 Bathroom / 13 Servants.

Mouthing

'My voice is my other.'[103]

The conversations, laughter, cries occurring in these two internal spaces have gone. My final project of the thesis is a set of voice recordings aimed at recovering their potential. The recordings speculate on the capacity of voice to 'sound' a space through both the things said and the space inside speech.

The voice recordings pick up on a strand of practice I have used for some time, discussed in the chapter 'Part-object, Part-architecture'. I use the voice in three ways: as a form of translation (between English and French, between architecture and writing, the visual and audible, between history and the present); as a tool for making observations about an architecture; and most importantly as an active method of producing architecture. Hélène Frichot remarks that writing is: 'a simultaneously expressive and material act […] Writing intervenes and disrupts, turns up the soil of material, the mixtures of bodies, just as it enlivens the incorporeal expressions of sense and nonsense making.'[104] The voice, a translation of writing, sends the text from the page through the body out into the air as a new material. 'Of what is the voice? Of air. It is present and absent in and through air,' explains Irigaray, 'The voice takes place between these two. Between air that is still and always available for the whole and that is perceived, first of all as an absence that is too great, and air that is used for and in

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[103] Hélène Cixous, 'Coming to Writing', in Hélène Cixous, *Coming to Writing and Other Essays,* (trans) Deborah Jenson, Sarah Cornell, Ann Liddle, Susan Sellers (Harvard University Press, 1991), 4.

[104] See Hélène Frichot, 'Following Hélène Cixous' Steps Towards a Writing Architecture', in *Architectural Theory Review*, Vol. 15/3 (2010), 313.

the entry into presence, there is the voice that recalls that she who is absent is there.'[105]

Throughout this thesis I have presented fictional texts which recover fragments of inhabitation of the *Maison de Verre*, wiped from its historiography. They 'write' the occupation. Here, in 'Mouthing', snippets of imagined speech, smell, sound and excerpts of text from French natalist propaganda are combined as spatial transcripts to recreate the plans of the two internal spaces – examination room and telephone booth as words and sentences [Plates 130–31].[106] This process uses fictional elements to reclaim the past air of the building: a form of design practice with an implicit critique of history. The plans are then recorded with my voice from the telephone booth in the *Maison de Verre* as parts of conversations, with other overlaid sounds. The result is delicate and odd voiced spaces.

The voice has many modes. It can be dark, low, husky, stuttering, forceful, clear, blank. As Hélène Cixous says 'The "breath" wants a form.'[107] The voice

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[105] Irigaray, *The Forgetting of Air in Martin Heidegger* (1999), 48.

[106] Propagandist posters carried messages such as: 'c'est la troisième que je vois mourir ainsi depuis peu, et le secret professionnel m'empêche de dénoncer leur avorteur!' [This is the third death I have seen recently, and confidentiality prevents me from denouncing their abortionist!]; or 'Assassiner une malade incurable c'est lui voler quelques années de souffrance. Assassiner un enfant prénatal c'est lui voler 60 années de vie.' [To murder an incurably ill woman is to steal a few years of her pain. To kill a prenatal child, is to steal sixty years of his or her life.] See also Andrés Horacio Reggiani, 'Procreating France: The Politics of Demography, 1919-1945', in *French Historical Studies*, 19/3 (Spring 1996), 740, 739. Also 'the factory is the killer of children', Adolphe Pinard, 'L'usine tueuse d'enfants', *Le Matin* (6 Dec. 1916).

[107] Cixous, 'Coming to Writing', 10. As Deborah Jenson, the editor, suggests 'souffle' in French means both breath and inspiration: 'the vocabulary of breathing, respiration, is aligned with a parallel vocabulary of inspiration', n. 7, 198. See also Hélène Cixous, *Souflles* (Paris: Des Femmes, 1998).

is a material to fashion the space of a narrative. With my own work I experimented with recording different voices – male, female, young – for their potential meaning: 'Is the woman's voice to be considered a thing, an object, or perhaps a piece or part of the equipment […]?'[108] A male voicing of the female potentially disturbed the meaning of the lost histories being marginalised as women's stories, yet in the end I chose to use my own voice. Initially I had wanted to record the transcripts on site, using minimal technology. The recordings, though pre-written, were to have a spontaneity, as if caught by surprise. The outcome of using just my voice, though, is that it places me at the centre of the story as the speaking subject, or medium through which it is phrased. In turn, the recording has the effect of distancing the material, turning it into something else, taking it elsewhere – it is present and past at the same time.

The voice moving from page to mouth to recording device, speaker, to ear recalls again the transmission of gas around the *Large Glass*. The recording reforms and moulds it as it moves through the fluid air from one state to another – from spittle to technological spangles – to be heard by your ear. The fluidity of air tenders the possibility of mingling speaking and hearing, across a gap. The ephemeral voice and the space of your possible reception and then internal translation of it is, I assert, both an intimate space, and a spatial production. Like writing, it indicates a further 'expanded practice' of architecture: voice as material designing a personal architecture.[109]

Like the work of certain sound artists, for example Janet Cardiff and Georges Bures Miller, the recordings are spatial reenactments of place. Cardiff

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[108] Ronell, *The Telephone Book* (1989), 202.

[109] Frichot, 'Following Hélène Cixous' Steps Towards a Writing Architecture' (2010), 313. As discussed in 'Part-object, Part-architecture'.

and Miller have produced installations involving the telephone, *Dreams-Telephone Series,* 2008–10, where upon lifting the receiver, the listener hears Cardiff's voice recounting a dream. Other sound installations, *Cabinet of Curiosities*, 2010, for example, locate voice recordings in domestic objects such as cabinet, drawer, suitcase. A cast of familiar objects recount narratives which would otherwise be lost. The works require active participation to experience the connections made – the listener moves through the space of the installations, lifting, stooping to listen.

My on-site recordings made at the *Maison de Verre* are divided into short pieces and transferred onto tiny forty second recorder chips. These are hidden in several small unprepossessing 'empty' but coloured handmade books, re-sited in the examination room [Plate 132].[110] The recording is activated upon opening the book. Most of the recordings are muffled, quiet, due to the location and manner of recording. They necessitate being actively overheard, by one person at a time. Attention from the listener and a physical interaction through opening the book, stooping to listen, or putting the ear close are required. The book becomes a small model of space, the listener becomes a witness to an event, implicated in its significance.

Air Part-architecture

In this final part of the chapter, I have described the form of a voiced design practice that has emerged from the thesis. The *Maison de Verre's* two interior rooms, the examination room and telephone booth trap sound, internalising the body and transmitting the voice to the exterior. The voiced books I present recover that space and its sounds as a 'spatial poetry'. The air in the book which transmits the

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[110] These recall Duchamp's *Boites en valises* 1935–40, shallow boxes containing miniature versions of the work he had made. The deluxe versions contained a 'new' artwork. Mine contain seemingly nothing, except a sound.

voice into the listener's ear is a spatial delay moulded between my speech and your reception of it. The outcome is voice as an almost perceivable tactile substance. These emerge from the building as pockets of life from the past, to a present audience. Importantly though, the voice – powerful, constructive, informative – ends, as Lacan says, as nothing.[111] Like the inhabitation of the house, it has already gone.

[111] Jacques Lacan, *Écrits* (trans.) Bruce Fink (New York: W.W. Norton, 2002), 693.

Plate 130: *Mouthing Transcript – Room 1*, Examination/Surgery, 2012.

A young women or girl even, looks out from a slit of window to the side and the door opens. Entry seemed covert, a slip-page between outside and in. I have passed through layers of glass like veils.

Pressed Nevada lenses will have been installed to

LIGHTLY the GLASS

She will be waiting She will be waiting She will

WITH WITH EVEN

I WILL HAVE COVERED THE STENCH

I WILL HAVE COVE

I WILL HA

In doing so I release her. We are safe in this glass room, and then I let her go.

Blindfolded I will feel my way through the building trace my fingers along its cracks, breathe in its smells, inhale its dust, breathe life into the gaps, as I breathe its life into my own lungs, feel its changes in temperature as shivers, catch unreadable glimpses of light, pieces of shadow and silhouette through the blindfold.

This is the third death I have

L'heure bleue

recently

seen

I think I may have, would have, will have smelt an air of A yellow-pink

To kill a prenatal child. is to steal sixty years of his or her life

Bloom room [womb]

EVEN EVEN EVEN EVEN EVEN EVEN EVEN EVEN

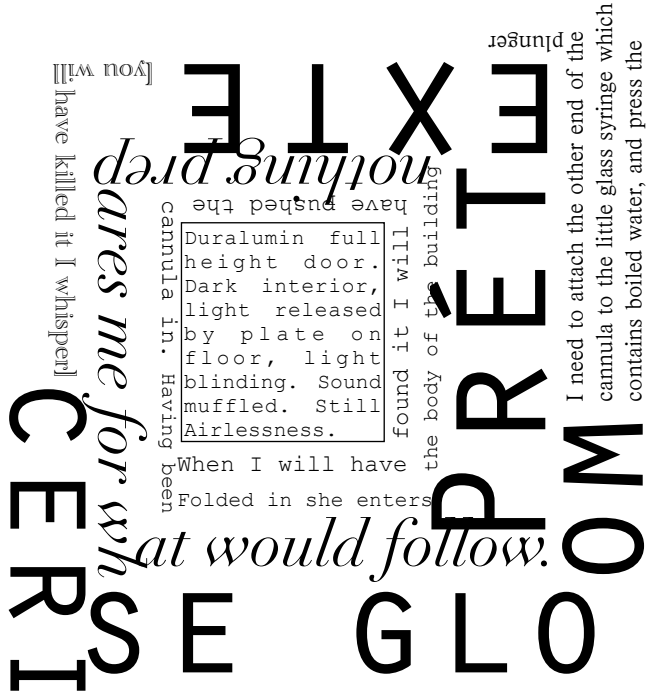
SWOLLEN

EVEN EVEN EVEN EVEN

lately is SILVERED

White studded rubber 300x300mm flooring tiles from Pirelli will have been installed throughout

Plate 131: *Mouthing Transcript – Room 2*, Telephone Booth, 2012.



Perfume names from 1930s Paris include: *Divine folie*, *Scandal*, *Joy*, *Chypre*, *Infanta*, *Vol de nuit*, *L'heure bleue*, *Sous le vent*, *Arpège*, *Prétexte*. See Elisabeth Barillé and Catherine Laroze, *The Book of Perfume* (Paris: Flammarion, 1995).

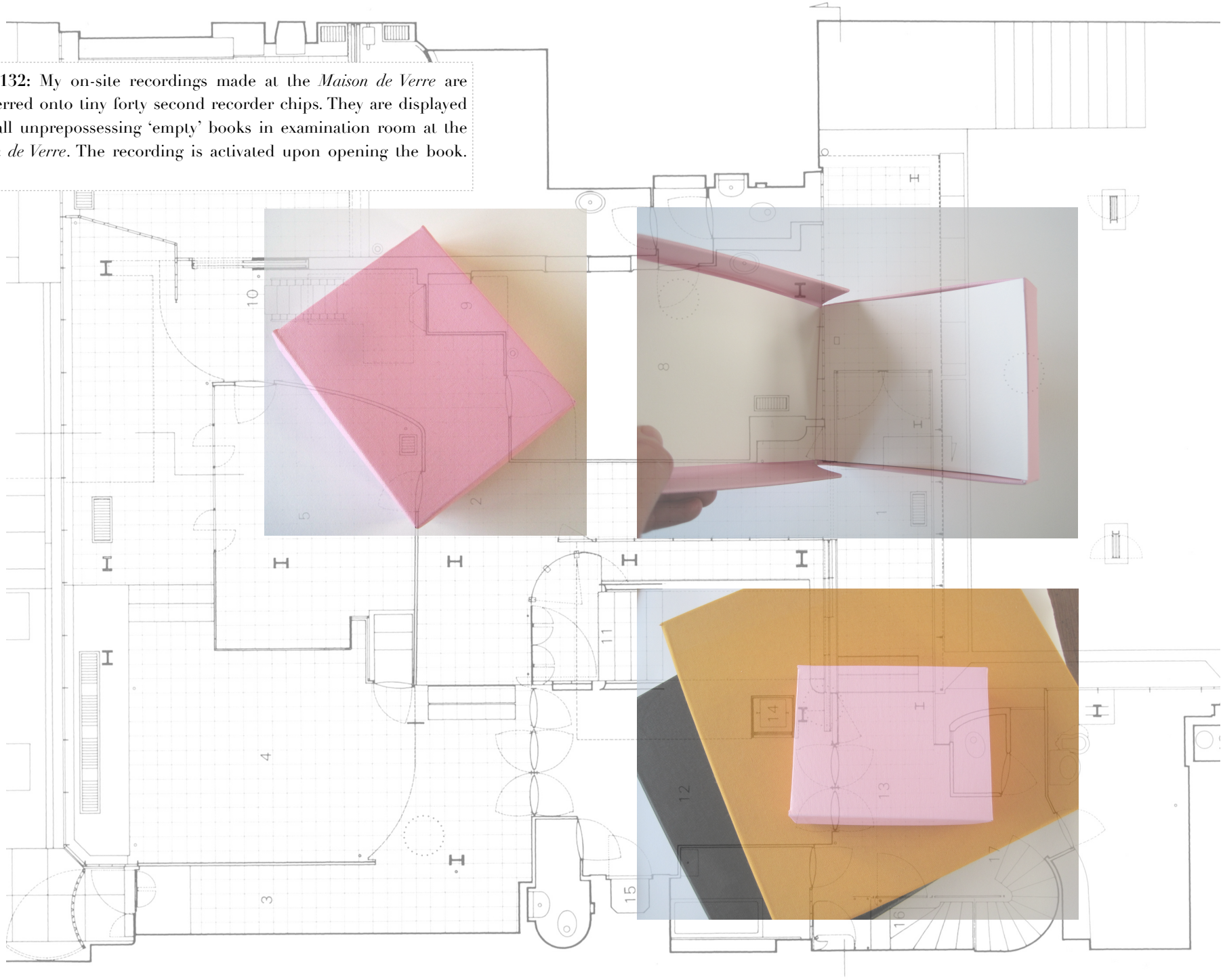


Plate 132: My on-site recordings made at the *Maison de Verre* are transferred onto tiny forty second recorder chips. They are displayed in small unprepossessing 'empty' books in examination room at the *Maison de Verre*. The recording is activated upon opening the book. 2012.

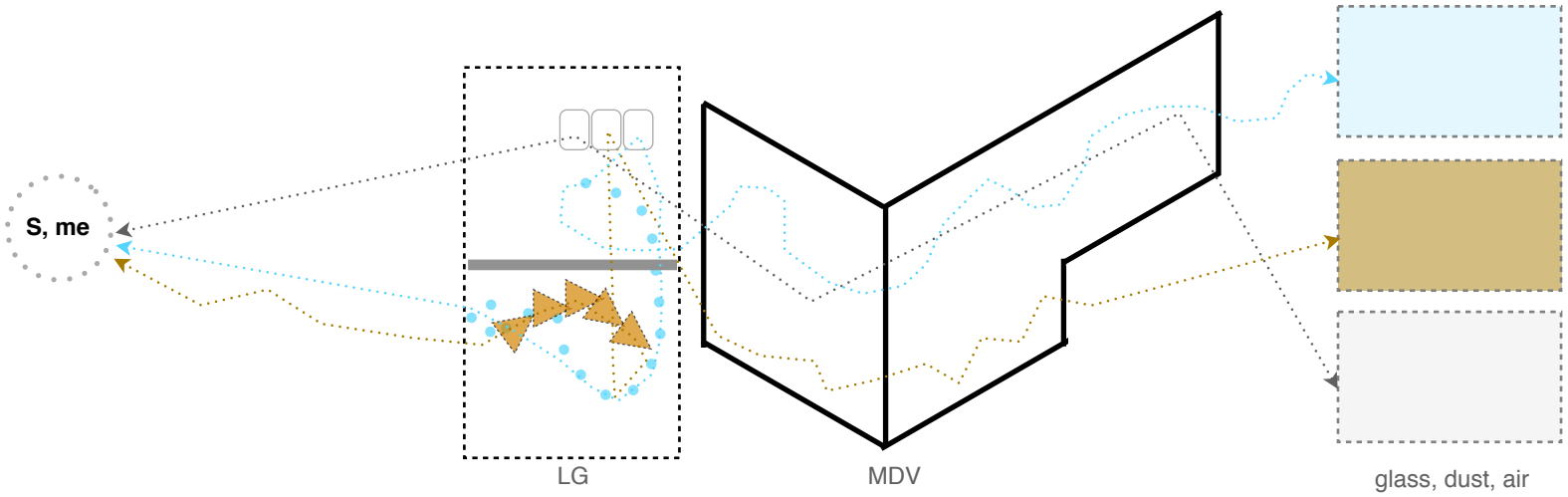
7 Conclusion

I began this thesis with a series of questions – 'hypotheses' which are examined and expanded in the chapters. There, I hope to have demonstrated the way in which the *Large Glass* and the *Maison de Verre* can be read as spatialisations of inter-war attitudes to sexuality, health and hygiene. Looking at them as a dialogue, they become each others' contexts and theories of spatial sexuality. Their materials, spatial relations and structures, I argue, construct and register their occupants' historic experiences.

My method combines historical and theoretical writing with speculative and interpretative design – writing, drawing, book forms and speech form an original approach to history/theory/design research. The three main chapters, 'Glass', 'Dust' and 'Air', appose these visual and textual discourses forming original combinations of text and image in the overlaps and juxtapositions, for example the 'Convolutions', 'Slips' and 'Cuts' described in 'Glass', or the 'Air-Cast' spaces and 'Mouthing Transcripts' of 'Air'. A new form of architectural construction as critical enquiry is proposed – an architecture of presence, absence and possibility, between past and future.

One of the questions asked in my 'Introduction' concerns Mary Reynolds' presence as a connecting figure between Duchamp and the *Maison de Verre*. Although I am certain Reynolds knew the Dalsaces, my hypothesis remains unproven. She continues, though, to haunt the thesis. At the end of the conclusion, then, I look again at the way my working methods, in particular the use of the book and the voice, thematically work away at the question of Reynolds. Beforehand, I review 'Glass', 'Dust' and 'Air' as spatial temporal approaches, and the manner in which dialogue, the part-architecture and the relationship between image and text have shaped the thesis.

Glass, Dust, Air



The chapters ‘Glass’, ‘Dust’ and ‘Air’ approach the *Large Glass* and the *Maison de Verre* in different temporal and spatial ways. ‘Glass’ arises from my own position in the present, looking back at the works’ significance to the early twentieth century. Making repeated visits, I use visual methods – drawn, photographic and written surveys and inventories – to record the types of glass now and assess their historic meaning. I make two overall observations: firstly, the glass serves to produce certain kinds of architectures – a building without a window on the one hand and a window without a building on the other; and secondly, it suggests that former objects and inhabitants were revealed and concealed behind it in particular ways, implying a social/sexual coding to their occupations. The glass present in the works, then, becomes a lens through which I make a new interpretation of their history.

Figure 7.1: Part-architecture unfolded as Glass, Dust, Air. Emma Cheatle, 2013.

‘Dust’ responds to the idea that much of past, though, is fragmented or lost, fails to become known ‘history’. Visiting the *Maison de Verre* and the *Large Glass*, I was struck by their gentle decay, their dustiness, which evoked a strong yet melancholy sense of their past. The dust deliberately collected on the *Large Glass*, captured and adhered to it in the liquid of the varnish is now, again, dry and cracked. Powdery dust filters down through the space between the vertical panes of glass to the junction between them and the transom [figure 5.8]. At the *Maison de Verre*, the once crisp materials are fissured and coated with the film of time [Plate 104]. If that passage of time began the moment the building was finished, I conjectured that collecting its dust now – dust specific to its spaces – would physically connect me to their past. Yet dust, in the end, is elusive and contradictory. Always of the past, it tells us little in the present. Likewise, the dust found now signifies the non-existence of that past. It can only create a sense of place through the addition of imagination. Dust then is a metaphor for not only loss but for the necessity of fiction to recover that loss.

Responding to the distasteful, melancholy of dust, ‘Air’ suggests an alternative creative potential: a future. Air is both stifled and the life giving and communicative force in the *Large Glass* and the *Maison de Verre*. It appears caught inside them in a kind of bubble, with no influx from the outside, holding their life in momentary stasis. That which was once present is trapped there. Yet following Duchamp’s infrathin, which describes the invisible leftovers from our interactions with the environment (for example, the mouth exhaling smoke leaves its own scent in that of the smoke), I point out that air is the transmission of these leftovers. In the *Maison de Verre*, it is the air, caught between the physicality of walls, floors, screens, that captures invisibly perceived sounds, atmospheres and smells, created by the presence of bodies. These are held together by what I have called air-casts.

Air, conveying sound, also focusses the importance of speech in my thesis. Experimental performed presentations and recorded spoken narratives aim to bring forth the past, project it forward. Recalling Walter Benjamin's idea that how we act in the present can recuperate the possibilities of the past, my spoken works propose the present as an ongoing dialogue with it.

Dialogue

The three chapters compose several dialogues across their material. Firstly, the *Large Glass* and the *Maison de Verre* are aligned as historic figures. Where one is a response to Paris in the 1910s laid out on vertical planes of glass, the other is a horizontal spatial unfolding of the same issues some years later. I do not, though, consider them simulacra. Instead, their dialogue, through juxtaposition and apposition, initiates new readings of each.

Secondly, both building and artwork unsettle formal dichotomies of solid and void, front and back, inside and out, raising issues between publicity and privacy, sexuality and domesticity, leading to what I have called their unhomeliness. The *Large Glass*, with Duchamp's resistance to 'trappings … a wife, children, a country house, an automobile', uses its motifs to resist consummation and therefore home.[1] As a window without walls, it represents the potential spatiality of home, whilst remaining an unfinished, momentarily occupied architecture. The *Maison de Verre*, a comfortable domestic interior for a seemingly stable marriage and family life, also contained the contrasting political space of the clinic which, through Dalsace's support and distribution of contraception, challenged the inevitability of perpetuating the same lifestyle for others.

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[1] Pierre Cabanne, *Dialogues with Marcel Duchamp* [1971], (trans.) Ron Padgett (New York: Viking Press, 1987), 15.

Thirdly, in this context, the works demonstrate historic sexual dialogues between male and female. The *Large Glass* gives a seemingly straightforward depiction of the female as Bride hovering above the male split into various possible Bachelors below. Their dialogue, though, is ambiguous leading to various conclusions: they are between blossoming/stimulating, waiting/thwarted, or being opened up/performing a surgical operation, as I have explored in my chapters.

The spaces of the *Maison de Verre* evoke parallel female/male relations. The man-of-the-house, Jean Dalsace, maintains a prime position with his office in the middle of the house connected to his clinic occupying most of the ground floor. His wife Annie, appears to both symbolically punctuate this with her bronze head and portrait, and float out of the way around the upper floors. As such, the house can be seen as a negotiation between their positioning as Bachelor and Bride. This becomes problematic, though, as, against the premise of the *Large Glass*, they are securely married with two children, a house and an automobile.

Instead, there are other possible identities to Bride and Bachelors throughout the house. The Bride could be the housekeeper, who from behind glass, peers down from the upper floors at the salon, and who possibly had to remain without child to keep her position in the house. Alternatively, the Dalsace's daughter peering down at the male gatherings in the salon from the upper floor corridor outside her bedroom, was the only real virgin. For me, though, the Bride is ultimately the visiting patient restored to 'virginity' by Dalsace's clinic. The Bachelors are incontrovertibly her lovers – 'the Gendarme, the Cuirassier, the Policeman, the Priest, the Station-master … the Bellboy, the Deliveryman from the department store, the Servant, the Gravedigger'[2] – who remain outside the

[2] Marcel Duchamp, *Marcel Duchamp, Notes* (trans.) Paul Matisse (Paris: Centre national d'art et de culture Georges Pompidou, 1980), note 123.

house in the city. The patient/Bride, then, in the *Maison de Verre* is a political register of the change to women's maternal choices.

These theoretical dialogues are structured into my thesis by dialogues between the three chapters, which look at overlapping ideas and issues from different points of view. This exposes a certain repetition, particularly in the fictions, with different visitors' similar but nuanced experiences of the same space. Further, my different modes of working produce a dialogue of different forms of interpretation resulting in a set of cross-related historical, theoretical and visual architectural writings, which read the past in the present.

Part-architecture

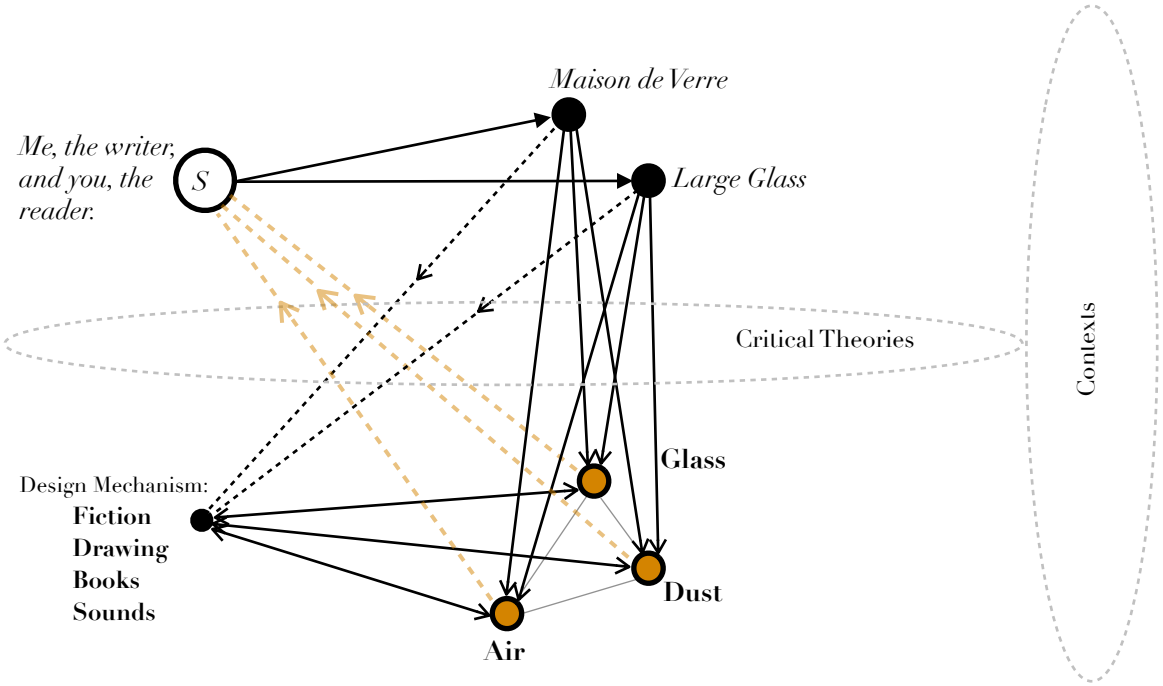

Figure 7.2: Part-architecture Schema. Emma Cheatle, 2013.

To reiterate, this thesis is an experiment in writing architecture. As a researcher, designer and writer, I use history, theory and design (in which I include fictional writing) to create a text. The design processes are activated by and activate the historical and theoretical research.

In my chapter 'Part-object, Part-architecture', I introduce the process by which this occurs as a schema [figure 7.2]. Jacques Lacan gave a warning when presenting his own schemata. It is important, he wrote, that the schema does not lead the subject 'to forget in an intuitive image the [psychoanalytic] analysis on which it is based'.[3] I interpret the Lacanian schema as an abstract code for the interactions and perceptions that are happening anyway over time and in space. Rather than drawing finite conclusions, the schema describes a three-dimensional stage for dynamic associations between subjects and objects. My own schema charts the relation I have had to the thesis over the last five years. Showing my intuitive connection to the *Maison de Verre* and the *Large Glass*, it indexes the way the ensuing chapters and designs operate as a process of exchange between parts. Rather than presenting another formal representation – an alternative building – it is a new narratological written architecture.

My writing looks forwards and backwards simultaneously. Like the future perfect tense – explaining that which has already happened – it refigures the architecture of the *Maison de Verre,* and its suggested past, now. It both recovers and reinvents that past. Working between history, theory and design, its words become a new object. In my 'Introduction' I speculate on whether a writing can be an architecture. The exemplar of this is Katja Grillner's *Ramble, Linger and Gaze*,

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[3] Jacques Lacan, *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge, 1991), 214.

which, displaying no visual work, uses only writing to construct place.[4] My thesis does something at a tangent to this – it develops a position *between* the visual and textual.

Between Image and Text

My approach to text and image exposes what could be thought of as a space between them. Two modes of working that I have used throughout my thesis implicitly explore this space: the artists' book and, less overtly, the lecture. As explained in 'Part-object, Part-architecture', the development of both came from early investigations on Paris, research on the L Schema and formal presentations I made. As important modes in the thesis, I return to them here to suggest the spatiality of their image-text relations.

Book

The potential of the book for me, is that it operates as a textual as well as a visual object – even wordless books are 'read', and those without pictures, for example Grillner's thesis, have a cover, design and form to be looked at. Narrative content evokes images whilst read. A book is between two and three dimensions – for moving through, decoding, reading, translating, its paper stock, text, texture, image, scale and line work into each other to effect the reading self. Occupied by the reader, his/her body engages with its interior through handling, looking and reading. The juxtapositions between the parts create the potential of a new space inhabited in the reader's imagination. A book is a place to live.

My own books experiment and collate my research ideas. Like Sharon Kivland's work, which is invariably reproduced in book form, the book becomes a

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[4] Katja Grillner, *Ramble, Linger and Gaze: Dialogues from the Landscape Garden* (Stockholm: Akademisk Avhandling, 2000.

record and a dissemination. Recent experiments present a book form which presents sheets of 'Zerkall Smooth' white paper with forms cut out following the plan of the building. Excerpts of text printed in reverse are seen on every second piece of paper. Because the pages are slightly translucent the text and cut outs begin to combine [Plate 133]. This object aims to reveal something of the connections above, but is also a new form – place to live – in its own right.

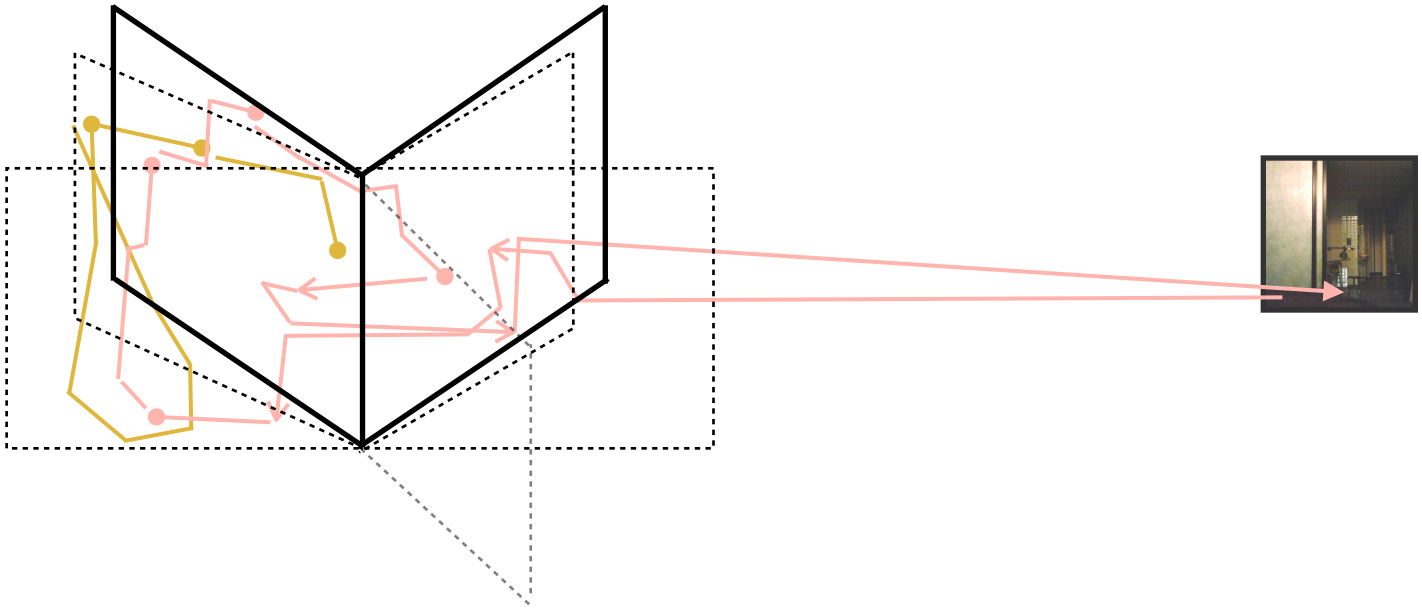

Figure 7.3: Book as interaction of lives and images. Emma Cheatle, 2013.

Lecture

Finally, the lecture has become an important creative and reflexive device for my work, helping me explore the possibilities of combining text and image and 'performing' them as speech and projected slide. 'Air', the most creative and philosophical chapter of my thesis, recognises that air, still overlooked in architectural

discourse, provides an agency for speaking. Following Luce Irigaray and Hélène Cixous' thinking, the voice in my work instigates a new creation of the text. Words are taken off the page and translated into air. Absent and present at the same time, the voice, seeking form, is an occupation of space and time.[5]

In a lecture I gave at the very end of the research, I overtly explored the potential to create a space between words and images. Two spoken texts, one history/theory and one fiction, overlaid images produced during the course of the research. The images – plan drawings of potential routes through the building and ambiguous blurred photographs – were presented as fleeting and filmic [Plates 50–67, 75–77, 134]. Text and image purposefully did not refer to each other, but aimed to produce something more by their juxtaposition. The result for the audience was a dreamlike sense of place and time, a blurring of subject and object.[6]

Through the form of the lecture, I explore my voice as another image, between writing and drawing. I am interested in whether one can form an architectural presence in this way. If we accept that language is a 'refusal of vision', as Rosalind Krauss suggests in her interpretation of Jacques Lacan's writing, a lecture positions the voice as something which is critically with and against the image.[7] Yet as a leftover, a by-product, the voice always slips away.[8] The lecture image, of spaces and movements, is also slippery – made only of light, it too dis-

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[5] Luce Irigaray, *The Forgetting of Air in Martin Heidegger*, (trans.) Mary Beth Mader (London: Athlone, 1999), 48. Hélène Cixous, 'Coming to Writing', in Hélène Cixous, *Coming to Writing and Other Essays,* (trans) Deborah Jenson, Sarah Cornell, Ann Liddle, Susan Sellers (Harvard University Press, 1991), 10.

[6] This refers to John Bold's observations made after the lecture at the University of Westminster, February 2013.

[7] Rosalind E. Krauss, *The Optical Unconscious* (Cambridge: MIT Press, 1994), 22

[8] See Jacques Lacan, 'Subversion of the Subject and Dialectic of Desire', in *Écrits: A Selection*, (trans.) Alan Sheridan (London: Routledge,(1991), 339.

appears. Something else is created, though, in this critical oscillation between coloured light and sounded language: a memory of space and the narratives through which we occupy it.

Mary Reynolds

The fictional narratives I use in the lecture described are based on 'Motes', the fictional text which brings Mary Reynolds into the *Maison de Verre*. The lecture, then, in part brings presence to absence, its narrative making otherwise elusive connections. As described above and in 'Dust', the motif of the book, through the specific practice of *reliure* (bookbinding), also potentially connects the *Maison de Verr*e and Duchamp. Through the book the protagonists become associated. The lives and works of bookbinder Mary Reynolds and her teacher Pierre Legrain co-incide with those of Pierre Chareau and the Dalsaces. Legrain had worked on furniture designs alongside Chareau as early as 1924. Madame Dalsace, friend and patron of Chareau, collected modern art and books, and may have owned Legrain and Reynolds' modern bindings, as well as Duchamp's *Les boîtes-en-valises*, 1935–41. Man Ray and Paul Éluard's *Les mains libres*, 1937, bound by Reynolds, was published by Jeanne Bucher, a friend of both the Chareaus and the Dalsaces, as was Éluard. Reynold's design for the binding suggests to me something of the complex interplay of spaces at the *Maison de Verre*. Further, Duchamp's use of vellum in *Étant donnés*, 1946–66 was probably informed by Reynolds' use of it in her own work. The skin of the book is aligned with both that of the body and the building.

I end, then, with Mary Reynolds. As a bookbinder making new interpretive skins, I wrap her figure around and through the *Large Glass* and the *Maison de Verre*, a cover and mediation to their interiors.

Plate 133: Book, 2012.

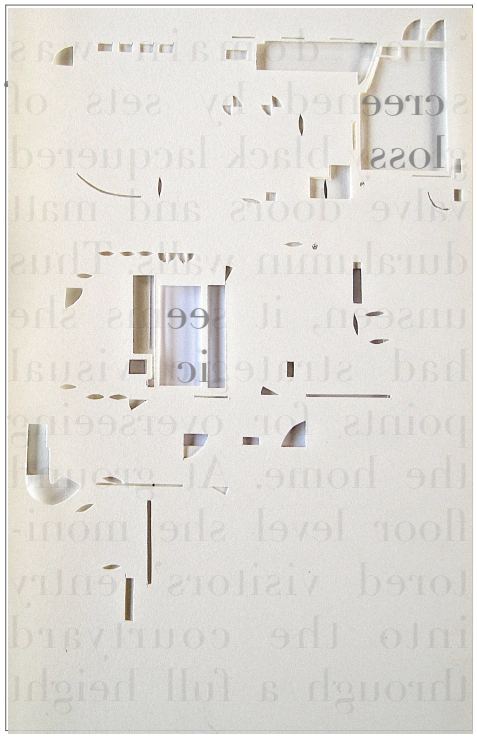


Plate 134: Lecture transcript and images, 2013.

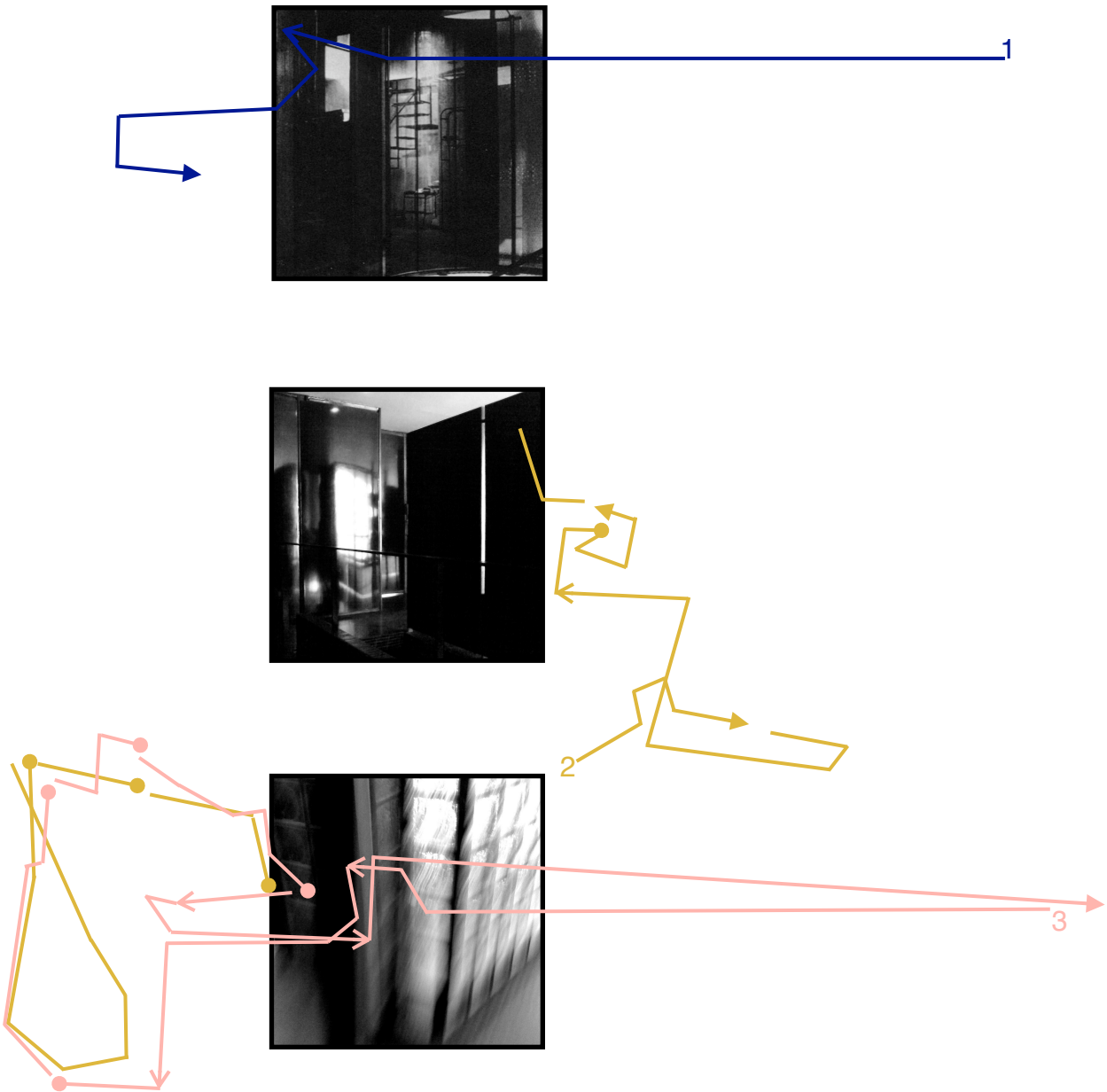
'It seems probable that Reynolds, and Duchamp, were at least acquainted with the Dalsaces through these overlapping circles. Yet surveying for traces of their occupation in the *Maison de Verre*, one merely finds dust. Nothing concrete suggests they were there. But what if the dust is the answer? After all, it is the body's slough combined with materials dropped off buildings.

Dust is history in the making, always in the past. It is the passage of time…'

'Her domain was screened by sets of glossy black lacquered valve doors and matt duralumin walls. Thus unseen, it seems she had strategic visual points for overseeing the home. At ground floor level she monitored visitors' entry into the courtyard through a full height framed glass panel, set back in shadow, beyond the outer lensed face of the servant wing, and from a slit window on the first floor. Once in the house she watched from her inner dark corridor.'

'*She will sit in the waiting room at the back of the house, on a leather chair imprinted by earlier visitors. Before I slide the fabric screens around her, she looks back to the main stair floating into the light. The front wall of glass is repeated softly at the back, delaying her between the two planes of light.*

The receptionist's office is a white floating block in front of her. There is a section of clerestory glazing and a very tall black lacquered door to the right. She



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